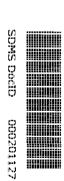
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Pre-Design Investigation/Soil Evaluation Report and Conceptual Removal Design/Removal Action Work Plan for Phase 2 Floodplain Properties Adjacent to the 1½ Mile Reach of Housatonic River

General Electric Company Pittsfield, Massachusetts

January 2004







Corporate Environmental Programs General Electric Company 190 Wocolawn Avenue, Pittsfield, IMA 01201

Transmitted Via Overnight Delivery

January 14, 2004

Mr. Michael Nalipinski U.S. Environmental Protection Agency EPA New England One Congress Street, Suite 1100 Boston, Massachusetts 02114-2023

Re: GE-Pittsfield/Housatonic River Site

Floodplain Residential and Non-Residential Properties Adjacent to 1½ Mile

Reach of Housatonic River (GECD710 and GECD720)

Pre-Design Investigation/Soil Evaluation Report and Conceptual Removal Design/Removal

Action Work Plan for Phase 2 Properties

Dear Mr. Nalipinski:

As you know, the General Electric Company (GE) and the U.S. Environmental Protection Agency (EPA) previously agreed that GE would address the non-riverbank portions of the Floodplain Current Residential Properties and Floodplain Non-Residential Properties Adjacent to the 1½ Mile Reach of the Housatonic River (as those areas are defined in the Consent Decree for this Site) in four separate phases corresponding generally to EPA's work on the 1½ Mile Reach. Enclosed is a document titled *Pre-Design Investigation/Soil Evaluation Report and Conceptual Removal Design/Removal Action Work Plan for Phase 2 Floodplain Properties Adjacent to the 1½ Mile Reach of Housatonic River.* This document presents the results of pre-design investigations conducted by GE for polychlorinated biphenyls (PCBs) in soils, as well as limited non-PCB sampling, at the Phase 2 floodplain properties (i.e., those located between the Elm Street Bridge and Dawes Avenue). In addition, this document presents the results of GE's evaluation of the need for further response actions at these properties.

As discussed in the enclosed document, GE has concluded that the available PCB soil data are complete and sufficient to conduct Removal Design/Removal Action (RD/RA) evaluations for these properties. Further, as shown in this document, based on an evaluation of the available PCB soil data, the existing PCB concentrations in soil at each Phase 2 property already meet the applicable PCB Performance Standards, and hence there is no need for any further response actions to address PCBs at these properties. As also discussed in this document, given the absence of any required remediation to address PCBs, and based on the results of the limited non-PCB investigations performed by GE, there is no need to conduct additional soil sampling, evaluations, or other response actions to address non-PCB constituents at these Phase 2 floodplain properties. In these circumstances, and consistent with EPA's October 20, 2003 conditional approval letter, GE has prepared this Pre-Design Investigation/Soil Evaluation Report and Conceptual RD/RA Work Plan for the Phase 2 properties.

Based on the evaluations presented in this document, GE believes that no further investigations, evaluations, or other response actions are needed for the Phase 2 properties. As noted in this report, GE will discuss with EPA the timing for a pre-certification inspection and Final Completion Report for these properties. In addition, GE will discuss with EPA and the City of Pittsfield the timing for the City to execute a Grant of Environmental Restriction and Easement (ERE) for the one City-owned property in

this phase (Parcel I8-4-7), which meets the applicable Performance Standards for recreational properties but would not meet the standards for residential properties.

Please let me know if you have any questions or comments.

Very truly yours,

Andrew T. Silfer, P.E. GE Project Coordinator

Enclosure

JJL/rneg

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Andrew T. Siffer/Acc

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Public Information Repositories

GE Internal Repository

Property Owner - Parcels I8-4-2, -3, -4

Property Owner -- Parcel I8-4-6

Property Owner - Parcel 18-4-101

Property Owner - Parcels I8-4-201/202

^{*}cover letter only

Pre-Design Investigation/Soil
Evaluation Report and Conceptual
Removal Design/Removal Action
Work Plan for Phase 2 Floodplain
Properties Adjacent to the 1½ Mile
Reach of Blousatonic River

General Electric Company Pittsfield, Massachusetts

January 2004



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1. Introduction

1.1 General

On October 27, 2000, a Consent Decree (CD) between by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies was entered by the United States District Court for the District of Massachusetts. The CD requires (among other things) the performance of Removal Actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents present in soils, sediment, and groundwater in several Removal Action Areas (RAAs) located in or near Pittsfield, Massachusetts. These RAAs are part of the GE-Pittsfield/Housatonic River Site (the Site). For each Removal Action, the CD and accompanying *Statement of Work for Removal Actions Outside the River* (SOW) (Appendix E to the CD) establish Performance Standards that must be achieved and specify the work plans and other documents that must be prepared to support the response actions for each RAA. These work plans/documents include (as appropriate) a Pre-Design Investigation Work Plan, a Pre-Design Investigation Report, a Conceptual Removal Design/Removal Action (RD/RA) Work Plan (if response actions are necessary), and a Final RD/RA Work Plan, if needed.

In January 2002, GE submitted to EPA a document titled *Pre-Design Investigation Work Plan for Floodplain Properties Adjacent to the 1½ Mile Reach of Housatonic River* (PDI Work Plan). The PDI Work Plan proposed initial pre-design PCB soil investigations for two of the RAAs identified in the CD and SOW: 1) Floodplain Current Residential Properties Adjacent to the 1½ Mile Reach — Actual/Potential Lawns; and 2) Floodplain Non-Residential Properties Adjacent to the 1½ Mile Reach (Excluding Banks). These RAAs (hereafter referred to as the 1½ Mile Floodplain RAAs) include the non-riverbank portions of several properties located between Lyman Street Bridge and the confluence of the East and West Branches of the Housatonic River, each of which is subject to Performance Standards established in the CD and SOW.

To provide coordination between any future response actions that may be needed for the 1½ Mile Floodplain RAAs and those to be separately conducted by EPA for sediments and riverbank soils in this same reach of the river, GE proposed in the PDI Work Plan that pre-design investigations and subsequent RD/RA activities (if necessary) for the 1½ Mile Floodplain RAAs be conducted in four phases:

Phase 1 – Lyman Street Bridge to Elm Street Bridge;

Phase 2 – Elm Street Bridge to Dawes Avenue;

Phase 3 – Dawes Avenue to Pomeroy Avenue; and

Phase 4 – Pomeroy Avenue to the Confluence.

The PDI Work Plan presented the available investigation data, described the initial soil sampling proposal for all properties within the 1½ Mile Floodplain RAAs, and included a phased schedule to implement those investigations. Additionally, the PDI Work Plan proposed to conduct the pre-design soil investigations in an iterative manner, with an initial focus on PCBs. In its conditional approval letter for the PDI Work Plan, dated July 8, 2002, EPA generally concurred with that phased and iterative approach. GE completed the above activities associated with the Phase 1 properties and documented those activities in a February 2003 report titled *Pre-Design Investigation and PCB Soil Evaluation Report for Phase 1 Floodplain Properties Adjacent to the 1½ Mile Reach of Housatonic River*.

Since that time, GE has performed similar activities for the Phase 2 properties. This *Pre-Design Investigation/Soil Evaluation Report and Conceptual Removal Design/Removal Action Work Plan for Phase 2 Floodplain Properties Adjacent to the 1½ Mile Reach of Housatonic River* (Phase 2 Investigation/Evaluation Report) summarizes the results of the soil investigations conducted at the Phase 2 properties, presents an evaluation of the available PCB data affecting those properties with respect to the applicable soil-related PCB Performance Standards established in the CD and SOW, and contains an overall assessment of the need for further response actions at the Phase 2 properties.

1.2 Description of Phase 2 Floodplain Properties

Phase 2 properties in the 1½ Mile Floodplain RAAs consist of several contiguous properties located along the north side of the Housatonic River between the Elm Street Bridge and Dawes Avenue (Figure 1). These include Parcel I8-4-6, Parcels 18-4-201/202 (which together were formerly Parcel I8-4-5 and comprise one commonly owned property), Parcel I8-4-2, -3, & -4 (which comprise one commonly owned property), Parcel I8-4-101 (formerly Parcel I8-4-1), and Parcel I8-4-7. All properties within this group are residential except for Parcel I8-4-7, which is an undeveloped property considered to be in recreational use, now owned by the City of Pittsfield.

The locations and results of the soil samples collected during the pre-design investigations, along with the prior soil sampling locations and results, are shown on Figure 2 (for Parcel 18-4-6), Figure 3 (for Parcels 18-4-201/202), Figure 4 (for Parcels 18-4-2, -3, & -4), Figure 5 (for Parcel 18-4-101), and Figure 6 (for Parcel 18-4-7).

Some of the properties included in Phase 2 have been previously subject to response actions to address PCB-containing soils. Specifically, Parcels I8-4-2, -3, & -4, and I8-4-101 have already been remediated and Response Action Outcome (RAO) Statements for these properties under the Massachusetts Contingency Plan (MCP) have been submitted to MDEP and EPA (on February 1, 1999 for Parcels I8-4-2, -3, & -4 and on October 1, 1998 for Parcel I8-4-101). Those RAO Statements demonstrated that, following remediation, spatial average PCB concentrations at both properties were below 2 ppm for the 0- to 1-foot depth increment and for the greater than 1 foot depth increments. In addition, at approximately the same time that these properties were remediated, GE undertook a large soil removal and bank stabilization project at Parcel I8-4-7, which resulted in the removal and off-site disposal of soils generally associated with the uppermost 3 feet of that property. The horizontal extent of soil removal associated with the activities summarized above is shown on Figure 4 (for Parcels I8-4-2, -3, & -4), Figure 5 (for Parcel I8-4-101), and Figure 6 (for Parcel I8-4-7).

1.3 Recent Activities for Phase 2 Properties

Following submittal of the PDI Work Plan in January 2002, GE determined that some of the information related to the Phase 2 properties was not accurate and did not reflect current conditions for certain of the properties within that phase. Thus, in a letter dated March 11, 2003, GE provided a revised Table 4-3 from the PDI Work Plan to EPA. Following a March 20, 2003 meeting with GE, EPA conditionally approved the pre-design investigations proposed in the PDI Work Plan for the Phase 2 properties in a letter dated April 9, 2003. In that letter, EPA directed that GE submit (within 7 days) a letter addressing the conditions in EPA's conditional approval letter, including the proposed additional sampling activities and a proposed sampling schedule.

By letter of April 16, 2003, GE addressed the conditions in EPA's April 9, 2003 conditional approval letter and presented a proposed schedule for the performance of initial pre-design investigations at these properties. EPA approved GE's letter on April 24, 2003. The approved initial pre-design investigations consisted of soil sampling for PCBs at several locations at four properties (to supplement the existing data set), as well as sampling at three locations on two previously remediated properties (Parcels 18-4-2, -3, & -4 and Parcel 18-4-101) for the non-PCB constituents listed in Appendix IX of 40 CFR 264 (excluding pesticides and herbicides), plus benzidine, 2-chloroethyl vinyl ether, and 1.2-diphenylhydrazine) (Appendix IX+3).

GE requested access permission for sampling at the properties subject to these pre-design investigations, and it obtained such access permission for all such properties except Parcel I8-4-101, at which access permission was not obtained from the property owner. For the Phase 2 properties for which access permissions were received, GE

completed the pre-design soil investigations between May 22 and 27, 2003. Following the performance of those pre-design investigations, GE submitted a letter to EPA dated July 1, 2003, which presented the results of those pre-design investigations and presented a preliminary assessment of the need for and scope of additional soil sampling for PCBs and non-PCB Appendix IX-3 constituents at these Phase 2 properties. For Parcel 18-4-101, even after repeated attempts, GE was unable to obtain permission to access the property to conduct the proposed pre-design soil investigations (involving one sampling location). In a letter dated October 20, 2003, EPA provided conditional approval of GE's July 1, 2003 letter, directed GE to evaluate the existing data on Parcel 18-4-101 without the need for additional sampling, and required that GE address the remaining conditions in EPA's letter in either: (i) a Pre-Design Investigation/PCB Soil Evaluation Report and Conceptual Remedial Design/Remedial Action Work Plan (consistent with the previous Phase 1 properties submittal).

The pre-design soil investigations at these properties were performed to supplement sampling and analysis previously performed by GE (between June 1995 and July 1996) and EPA (between November 1998 and January 1999). The pre-design soil investigations were conducted in accordance with the PDI Work Plan and GE's April 16, 2003 response to EPA comments, as conditionally approved by EPA (April 9 and 24, 2003 conditional approval letters, respectively). For Parcel 18-4-101, at which GE was unable to obtain access from the current property owner. GE conducted an analysis of available soil data based on the results of pre-design and prior investigations, consistent with EPA's October 20, 2003 conditional approval letter, to determine whether existing PCB concentrations in soil at this property meet the applicable PCB Performance Standards and whether the need exists for future response actions to address PCBs at this property.

This document provides a summary of the results of the investigations performed at the subject properties. As discussed herein, GE has concluded that the available soil PCB data are sufficient to conduct RD/RA evaluations for these properties. Further, based on an evaluation of the available soil PCB data, the existing PCB concentrations in soils at each Phase 2 property already meet the applicable PCB Performance Standards established in the CD, so that no further response actions are needed to address PCBs at these properties. Finally, as also discussed in this document, given the absence of any required remediation to address PCBs, and based on the results of the non-PCB Appendix IX+3 investigations performed by GE, there is no need to conduct soil sampling for other, non-PCB constituents at these properties. Therefore, consistent with EPA's October 20, 2003 conditional approval letter, GE has prepared this Phase 2 Investigation/Evaluation Report.

1.4 Format of Document

The remainder of this document is presented in five sections and is supplemented by several tables, figures, and appendices that summarize the available soils data resulting from recent, as well as historical sampling activities. Section 2 describes the pre-design soil investigations, the available soil data set, and GE's assessment of data quality, and also includes an assessment of remaining data needs. Section 3 presents the RD/RA evaluations conducted for PCBs in soils. Section 4 provides an evaluation of the data on non-PCB Appendix IX+3 constituents and the need for additional sampling for such constituents at the Phase 2 properties. Finally, Section 5 describes future activities related to the Phase 2 floodplain properties.

2. Summary of Soil Investigations and Data

2.1 Pre-Design Investigations

The pre-design soil investigations for the Phase 2 properties were conducted from May 22 through May 27, 2003, in accordance with the PDI Work Plan as subsequently modified by GE and conditionally approved by EPA. The pre-design investigations (including sample collection and survey activities) were performed by Blasland, Bouck & Lee. Inc. (BBL), while analytical services were provided by CT&E Environmental Services, Inc. All field and analytical activities conducted by GE were performed in accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP) (December 2002). During the performance of these activities. Weston Solutions, Inc. (Weston) performed oversight activities on behalf of EPA. This pre-design soil sampling effort involved the collection and PCB analysis of approximately 54 soil samples from 27 locations, as well as the collection and analysis of two soil samples from two locations for other Appendix IX+3 constituents. The actual pre-design sample locations, frequencies, and depths were consistent with the proposals contained in the PDI Work Plans, with one exception: As discussed in Section 1, access permission for Parcel 18-4-101 was not obtained from the property owner. Thus, soil samples from location 2-SB-12 could not be collected from Parcel 18-4-101 and analyzed as proposed in GE's April 16, 2003 letter. Evaluation of that parcel has been handled, as discussed in Section 1, as directed in EPA's conditional approval letter dated October 20, 2003.

In addition to these data, other PCB data have been obtained and were incorporated, as appropriate, into this document. These data resulted from prior extensive soil sampling activities conducted by GE and EPA at these properties to support the remediation activities discussed above, as well as subsequent to the performance of those remediation activities. During preparation of the PDI Work Plan, GE performed an assessment of the existing PCB data. From that effort, it was determined that certain existing data could be used to support RD/RA evaluations.

2.2 Description of Overall Data Set

After incorporating the results of recent and historical investigations), the overall PCB soil data available to support the PCB RD/RA evaluations for the Phase 2 properties include results from approximately 540 analyses of soil samples collected from approximately 115 locations. The following table summarizes the current PCB data set (not including QA/QC analyses with the exception of field duplicate soil samples):

Analytical Parameter	GE Pre-Design Analyses	EPA Pre-Design Analyses	Historical Soil Analyses	Total Soil Analyses
PCBs	54	0	486	540

The locations from which these soil samples were collected, along with the PCB sample results, are shown on Figures 2 through 6. The pre-design PCB analytical results for soil samples collected by GE at the Phase 2 floodplain properties are provided in Table 1. Table 2 provides the historical PCB results from those properties for samples analyzed by both GE and EPA. Soil boring logs of the most recent investigation are presented in Appendix A.

For other Appendix IX+3 constituents, the available data set consists of the results from the two samples collected by GE during the pre-design investigations. These results are presented in Table 3. Note that Table 3 only presents the results for constituents that were detected in one or more samples, with the exception of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (PCDDs/PCDFs), for which the table presents the results of all constituents analyzed. Complete listings of the Appendix IX+3 laboratory results for GE's pre-design samples are included in Appendix B.

2.3 Data Quality Assessment

Soil samples collected by GE for PCB analysis during the pre-design investigations were analyzed for Aroclor-specific PCBs by EPA Method 8082. The PCB results were reported on a dry-weight basis with a detection limit of approximately 0.05 parts per million (ppm, or milligrams per kilogram, rng/kg) for all Aroclors.

For the pre-design activities performed by GE, quality control samples (i.e., matrix spike/matrix spike duplicates, field duplicates, and field blanks) were collected in accordance with the FSP/QAPP. The FSP/QAPP also presents the quality control criteria and corrective action procedures to be followed for each analytical and field-generated quality control sample. Overall project quality assurance was provided by following the procedures for sample collection and analysis, corrective action, and data reporting and validation specified in the FSP/QAPP.

All of the GE pre-design analytical data, for both PCBs and other Appendix IX+3 constituents have undergone data validation in accordance with Section 7.5 of the FSP/QAPP. The results of this assessment for the pre-design samples are summarized in Appendix C. As discussed in the data validation report presented in Appendix C, 100% of the recent GE pre-design PCB and non-PCB data are considered to be usable. Thus, the overall pre-design soil data set meets the data quality objectives set forth in the PDI Work Plan and the FSP/QAPP.

As indicated in the PDI Work Plan, the historical PCB soil data were previously reviewed for overall quality, based on the accompanying laboratory documentation (where available). That data review resulted in the designation of some data as usable both to satisfy pre-design investigation requirements and for PCB remedial evaluations, and other data as supplemental data for use in PCB remedial evaluations. No data were rejected or eliminated.

2.4 Assessment of Potential Data Needs

Following the performance of the pre-design soil investigations performed in May 2003, GE provided EPA a sampling summary letter report (dated July 1, 2003) for the Phase 2 floodplain properties. As indicated in that letter, GE did not identify the need for any additional pre-design sampling at these properties beyond completing the proposed investigations at Parcel I8-4-101, for which access permission was not obtained. In a letter dated October 20, 2003, EPA concurred with this evaluation, acknowledged GE's difficulties in obtaining access permission for Parcel I8-4-101, and directed GE to evaluate the existing data on that parcel without the need for additional sampling. In these circumstances, it is concluded that the available soil data are sufficient to support RD/RA evaluations for the Phase 2 floodplain properties.

3. PCB Soil Evaluations

3.1 General

Based on an initial review of the available PCB soil data set, it was previously determined that the existing soil conditions within the Phase 2 properties may already achieve the applicable Performance Standards for PCBs, such that no response actions would be necessary. As a follow-up to this initial finding, GE has conducted a detailed evaluation of PCBs in these soils consistent with the requirements of the CD and SOW. This section summarizes those evaluations. Included are an overview of the applicable PCB-related Performance Standards for the 1½ Mile Floodplain RAAs (Section 3.2) and a description of the procedures established in the CD and SOW for conducting RD/RA evaluations (Section 3.3). The results of the RD/RA evaluations are presented in Sections 3.4 and 3.5.

3.2 Overview of PCB-Related Performance Standards

The Performance Standards for soils at the 1½ Mile Floodplain RAAs are set forth in Paragraphs 24, 28.a. and 29 of the CD and Section 2.5.2 of the SOW. These Performance Standards have been established based on (among other considerations) the use of the property (e.g., residential, recreational, or commercial/industrial) and whether a Grant of Environmental Restriction and Easement (ERE), if needed, will be obtained for non-residential properties.

The need for response actions for PCBs in soils within the 1½ Mile Floodplain RAAs is generally based on the results of spatial averaging conducted for each property in accordance with the procedures described in Attachment E to the SOW. Included in that attachment are protocols related to the selection of the appropriate areas and depths of a property subject to spatial averaging, the methods to be used to determine existing spatial average PCB concentrations, and the procedures to be used to assess whether the anticipated response actions will achieve the applicable Performance Standards. For purposes of such averaging, the SOW provides that GE may consider the entire Actual/Potential Lawn of a residential property or the entire non-riverbank portion of a non-residential property—including (in both cases) the portion lying within the floodplain and any portion outside the floodplain — as an averaging area, provided that, for surface soil: (a) residential, recreational, or commercial exposure (as applicable) is equally likely throughout that area; and (b) GE ensures the removal of all soils in the top foot in unpaved portions of the property that contain PCB concentrations above certain not-to-exceed (NTE) levels identified below (unless the averaging area is less than certain specified sizes).

Once calculated, the spatial average PCB concentrations for a given property are compared to the applicable PCB Performance Standards. Such standards have been developed for residential, recreational, and commercial/industrial properties within the 1½ Mile Floodplain RAAs. The Phase 2 properties within the 1½ Mile Floodplain RAAs include residential properties and one recreational property and do not contain any commercial/industrial properties. An overview of the PCB Performance Standards for these Phase 2 properties is presented below:

- For <u>residential</u> properties located in Phase 2 of these RAAs, GE must calculate spatial average PCB concentrations for the 0- to 1-foot and 1- to X-foot depth increment at each Actual/Potential Lawn averaging area, where X equals the depth at which PCBs are detected within the subject property (up to a maximum depth of 15 feet). If the spatial average PCB concentration in the 0- to 1-foot or 1- to X-foot depth increments exceeds 2 ppm, GE must remove and replace soils as necessary to achieve a spatial average PCB concentration at or below 2 ppm in each of those depth increments. In addition, if the averaging area for surface soil consists of the entire Actual/Potential Lawn of the property and exceeds 0.25 acre in size, GE must remove all soils in the top foot of unpaved areas that have PCB concentrations exceeding 10 ppm.
- For the City of Pittsfield-owned recreational property located in Phase 2 (Parcel 18-4-7), since the City has agreed in the Consent Decree to execute EREs for all City-owned properties at the Site where EREs may be needed, it is assumed that this property will be subject to an ERE.. Therefore, based on the applicable standards for recreational properties with EREs, GE will calculate spatial average PCB concentrations for the 0- to 1-foot and 1- to 3-foot depth increments for the non-riverbank area. If the spatial average PCB concentration exceeds 10 ppm in the top foot or 15 ppm in the 1- to 3-foot depth increment, GE must remove and replace soils as necessary to achieve spatial average PCB concentrations at or below those levels in the increments specified above. Additionally, if the averaging area for surface soil consists of the entire non-bank portion of the property and exceeds 0.5 acre in size, GE must remove all soils in the top foot of unpaved areas that have PCB concentrations exceeding 50 ppm. GE must then calculate the spatial average PCB concentration for the 0- to 15-foot depth increment (or to whatever depth sampling data exist, if less than 15 feet), incorporating the anticipated performance of any response actions for the uppermost 3 feet of the averaging area. If that spatial average exceeds 100 ppm, GE must install an engineered barrier in accordance with the specifications for such barriers contained in the SOW. In addition:
 - If utilities potentially subject to emergency repair are present (e.g., water, gas, sewer, electricity, communication, and storm water), GE must calculate a spatial average PCB concentration for the appropriate

utility corridor. If that average exceeds 200 ppm, GE must evaluate whether any additional response actions are necessary for that utility corridor.

- If a new sub-grade utility is installed at the property or if an existing utility is repaired or replaced. GE must ensure that the spatial average PCB concentration of the backfill materials is at or below 10 ppm in the top 3 feet and 25 ppm for soils at greater depths.

3.3 Summary of PCB Evaluation Procedures

The general procedures used to calculate spatial average PCB concentrations are established in Attachment E to the SOW (Protocols for PCB Spatial Averaging) and are summarized below. To perform the evaluations summarized in this section, several detailed maps and computer spreadsheets have been prepared. These materials are provided in Appendix C to this report.

The initial step in the calculation of spatial average PCB concentrations involves the preparation of a detailed site plan to illustrate the following features:

- property/area boundaries;
- surface topography;
- soil sampling locations within and adjacent to area;
- presence of roadways, utilities, easements, etc.;
- presence of buildings, pavement, and other permanent structures: and
- other significant site features.

To support the RD/RA evaluations, survey information provided by EPA was used to develop the base mapping for the PCB evaluations discussed below. It is GE's understanding that this survey information was generated for use in EPA's design for the Phase 1/Phase 2 transition of the 1½ Mile Reach Removal Action. As such, it is considered adequate for use in RD/RA evaluations for the Phase 2 floodplain properties.

The next step in the evaluation process is the development of Theissen polygon maps for each averaging area and depth interval subject to the PCB Performance Standards established in the CD and SOW. Theissen polygon mapping involves the use of computer software to draw perpendicular bisector lines between adjacent sample locations to create two-dimensional, sample-specific polygon areas. Certain boundary conditions impact the

generation of Theissen polygons, such as the boundaries of the area subject to averaging, presence of paved and unpaved areas, easement boundaries, building footprints, property lines, etc. As appropriate, the computer-generated Theissen polygons are modified to reflect actual site conditions, locations of property ownership lines, or other specific or unique site considerations. Once the Theissen polygon mapping is complete, the soil areas and depths subject to PCB Performance Standards (and possible response actions) are adequately defined for use in subsequent evaluations. After generation of the Theissen polygons, polygon identification numbers are assigned to each polygon and the surface area of each polygon is calculated.

The next step in the calculation of spatial average PCB concentrations is the development of computer spreadsheets to combine information obtained from the Theissen polygon mapping (i.e., polygon ID and area for each polygon) with the analytical results of soil sampling to provide a three-dimensional characterization of the soils associated with each polygon. The volume of soil associated with each polygon is based on the surface area of the polygon multiplied by the corresponding depth of soil for which samples were collected. Using the information described above, a spatial average PCB concentration for each relevant depth increment is derived by multiplying the volume of each polygon by its assigned PCB concentration, summing the results of this calculation for each polygon involved in the evaluation, and then dividing that sum by the cumulative soil volume associated with all of the polygons. This procedure yields a spatial average PCB concentration that incorporates both volume- and area-weighted considerations.

3.4 Summary of PCB Evaluations for Properties Without Prior RAO Statements

Using the available PCB soils data and spatial averaging procedures summarized in Section 3.3, spatial average PCB concentrations have been calculated for soils for the Phase 2 properties for which RAO Statements were not previously submitted. (The properties with prior RAO Statements are discussed below in Section 3.5.) Once calculated, these concentrations were compared to the applicable PCB Performance Standards. A summary of these evaluations and corresponding results is presented below on a property-specific basis.

To support the PCB evaluations discussed below, the following evaluation materials have been prepared for each property and are included in Appendix D:

Site mapping identifying specific Theissen polygons for several depth increments within each property; and

 Computer spreadsheets for the relevant depth increments, which incorporate the site plan information (i.e., Theissen polygon size) and the corresponding PCB analytical data and show the resulting spatial average PCB concentrations for those depth increments.

A summary of the evaluation results is provided below.

3.4.1 Parcel 18-4-6

Parcel I8-4-6 is a non-GE-owned residential property. Using the available PCB soils data and spatial averaging procedures previously summarized, the existing spatial average PCB concentration for soils in the 0- to 1-foot depth increment is 0.27 ppm. For the 1- to X-foot depth increment, the data from the 1- to 2-foot depth increment were used (since PCBs were not detected below 2 feet), and the resulting spatial average PCB concentration is 0.39 ppm. Tables D-1 and D-2 of Appendix D provide a summary of the spatial average PCB calculations for these depth increments. There is no applicable NTE level for this property as the Actual/Potential Lawn of the property is less than 0.25 acre in size.

Based on the evaluation results summarized above, existing conditions at this property already achieve the applicable PCB Performance Standards for residential properties. Therefore, no response actions are necessary to address PCBs in soils at this property.

3.4.2 Parcels 18-4-201/202

Parcels I8-4-201/202 (which together were formerly Parcel I8-4-5) comprise a residential property owned in common by a party other than GE. (Although these parcels now comprise two parcels for tax purposes, they may be treated as a single averaging area under Section 2.5.2 of Attachment E to the SOW as they are not separately owned.) Based on the PCB soils data available for this property, the existing spatial average PCB concentration for soils in the 0- to 1-foot depth increment is 1.08 ppm. For the 1- to X-foot depth increment, the data from the 1- to 7-foot depth increment were used (since PCBs were not detected below 7 feet), and the resulting spatial average PCB concentration is 0.74 ppm. Tables D-3 and D-4 of Appendix D provide a summary of the spatial average PCB calculations for these depth increments. In addition, the maximum PCB concentration in the uppermost foot of unpaved soil is 6.1 ppm, which is below the applicable NTE level of 10 ppm for a residential property.

Based on the evaluation results summarized above, existing conditions at this property already achieve the applicable PCB Performance Standards for residential properties. Therefore, no response actions are necessary to address PCBs in soils at this property.

It should be noted that four surface soil samples collected from the riverbank at or adjacent to this property contain PCB concentrations that would exceed the NTE level for a residential property (10 ppm) -- sample 2-SS-8 (35 ppm; 0- to 1-foot depth increment), sample 2-SS-8 (35 ppm; 0- to 1-foot depth increment), sample 18-4-7-15 (244 ppm; 0.5- to 1-foot depth increment), and sample 18-4-7-22 (13 ppm; 0.5- to 1-foot depth increment). Each of these samples (shown on Figure 3) is located within the portion of the riverbank that is subject to EPA's 1½ Mile Reach Removal Action. Two of these samples (18-4-7-15 and 18-4-7-22) were collected from an adjacent property (Parcel 18-4-7), and GE has previously addressed these locations through the performance of a large soil removal and bank stabilization project on Parcel 18-4-7. However, the polygons associated with these riverbank samples marginally extend onto the Actual/Potential Lawn portion of Parcels 18-4-201/202. The other two samples (2-SS-8 and 2-SS-12) are located within the upper portion of the bank on this property. Given the location of these samples, the similar levels of PCBs detected in other nearby bank soil samples, and the low levels of PCBs detected in non-bank areas in the immediate vicinity of these samples, the elevated PCB soil concentrations represented by these riverbank samples appear to be limited to the bank portions of the property. However, the Theissen polygons associated with each of these samples marginally extend onto the Actual/Potential Lawn portion of this property (i.e., the portion of the property associated with the 1½ Mile Floodplain RAAs).

In these circumstances, to be conservative, GE has included the portions of these samples' polygons extending onto the Actual/Potential Lawn portion of the property, using pre-removal data for samples 18-4-7-15 and 18-4-7-22 and the recent data for samples 2-SS-8 and 2-SS-12, in the spatial average evaluations presented in Tables D-3 and D-4. As shown in those tables and discussed above, even when including these data in the spatial average evaluations, the average PCB concentrations are below the applicable Performance Standards for the Actual/Potential Lawn Area. GE anticipates that EPA will address the locations of these riverbank samples themselves as part of the 1½ Mile Reach Removal Action for this stretch of river — i.e., between Elm Street Bridge and Dawes Avenue.

3.4.3 Parcel 18-4-7

Parcel I8-4-7 is the recreational property owned by the City of Pittsfield. Using the available PCB soils data and spatial averaging procedures previously summarized, the existing spatial average PCB concentrations for soils at this property are 6.22 ppm for the 0- to 1-foot depth increment, 4.15 ppm for the 1- to 3-foot depth increment, and 4.67

ppm for the 0- to 15-foot depth increment. Tables D-5 through D-8 of Appendix D provide a summary of the spatial average PCB calculations. There is no applicable NTE level for this property as the Actual/Potential Lawn of the property is less than 0.50 acre in size.

Based on the above evaluation, the applicable PCB Performance Standards are already met under existing conditions at Parcel I8-4-7, and thus no further response actions are necessary to address PCBs at this property. However, since the existing soil PCB concentrations would not meet the standards for residential properties, it will be necessary for the City to execute an ERE for this property.

3.5 Summary of Evaluations for Previously Remediated Properties with RAO Statements

As noted in Section 1, some of the properties in Phase 2 have been previously subject to the performance of response actions to remove PCB-containing soils. Specifically, Parcels 18-4-2, -3, & -4 and Parcel 18-4-101 have already been remediated as part of Immediate Response Actions (IRAs) under the MCP, and RAO Statements for these properties have been submitted to MDEP and EPA (on February 1, 1999 for Parcels 18-4-2, -3, & -4 and on October 1, 1998 for Parcel 18-4-101, formerly Parcel 18-4-1). Those RAO Statements demonstrate that, following the remediation, spatial average PCB concentrations at both properties were below 2 ppm for the 0- to 1-foot depth increment and the greater than 1 foot depth increment. In the course of performing the most recent pre-design investigations, some additional PCB soil data have been collected that could represent soils within Parcels 18-4-2, -3, -4, and 18-4-101 (i.e., Theissen polygons related to these new samples could extend into these parcels). As such, GE has evaluated the recent pre-design soil PCB data relative to the evaluations previously performed to support the RAO Statements for those properties. The results of the previous evaluations and an evaluation of the recent pre-design sampling are discussed below.

3.5.1 Parcels 18-4-2, -3, & -4

Parcels 18-4-2, -3, & -4 comprise a non-GE-owned residential property within Phase 2. As described in GE's *Immediate Response Action Completion Report for Parcel 18-4-2, -3, & -4* (BBL, February 1999), between December 5 and 15, 1995, approximately 250 cubic yards (cy) of soil were removed from Parcels 18-4-2, -3, & -4 at depths ranging between 1 and 4 feet below ground surface (bgs). Following the performance of removal activities, an evaluation of post-remediation conditions was conducted to confirm that: 1) the IRA was effective in abating the potential imminent hazard identified at the property (i.e., PCB concentration above 10 ppm); and 2) a condition of No Significant Risk and a Permanent Solution have been achieved in accordance with the MCP. Based on the available

PCB soils data, that evaluation showed that the existing spatial average PCB concentrations were 0.35 ppm for soils in the 0- to 1-foot depth increment and 0.81 ppm for soils at depths greater than 1 foot (up to a depth of 5 feet bgs). In addition, the maximum PCB concentration in the uppermost foot of unpaved soil was 0.745 ppm, which is well below the applicable NTE level of 10 ppm for a residential property.

The most recent pre-design soil investigations involved the collection of six samples (total) from three locations (2-SB-13, 2-SB-14, and 2-SB-15) on Parcel I8-4-2, -3, & -4 (Figure 4). These samples were collected from beneath the areas that were previously remediated. As shown on Figure 4, the sample results ranged in depth from 3 feet to 9 feet, with a maximum PCB concentration of 0.097 ppm (in the 3- to 5-foot depth increment). Based on these results, and in consideration of the evaluation results summarized above, existing conditions at this property already achieve the applicable PCB Performance Standards for residential properties and inclusion of recent PCB soils data would further decrease the overall resulting spatial average PCB concentration in the greater than 1 foot depth interval. Therefore, no further response actions are necessary to address PCBs in soils at this property.

3.5.2 Parcel I8-4-101

Parcel I8-4-101 (formerly Parcel I8-4-1) is also a non-GE-owned residential property within Phase 2. As described in GE's *Immediate Response Action Completion Report for Parcel 18-4-1* (BBL., September 1998), between December 5 and 15, 1995 approximately 130 cy of soil were removed from Parcel I8-4-101 at depths ranging between 1 and 4 feet bgs. Similar to Parcels 18-4-2, -3, & -4, following the performance of removal activities, an evaluation of post-remediation conditions was conducted to confirm that: 1) the IRA was effective in abating the potential imminent hazard identified at the property (i.e., PCB concentration above 10 ppm); and 2) a condition of No Significant Risk and a Permanent Solution have been achieved in accordance with the MCP. Using the available PCB soils data, that evaluation showed that the existing spatial average PCB concentrations for were 0.5 ppm for soils in the 0- to 1-foot depth increment and 0.9 ppm for soils at depths greater than 1 foot (up to a depth of 5 feet bgs). There is no applicable NTE level for this property as the Actual/Potential Lawn of the property is less than 0.25 acre in size.

GE's pre-design sampling proposal called for the collection of additional samples from one location on Parcel 18-4-101 (2-SB-12). As discussed above, GE has been unable to obtain property access to perform those sampling activities. However, as identified on Figure 5, recent pre-design sampling at soil boring 2-SB-14 (located approximately 15 feet from proposed soil boring 2-SB-12) detected a maximum PCB concentration of 0.039 ppm in the 7- to 9-foot depth increment. In consideration of this result together with the evaluation results summarized above and EPA's determination not to require further sampling of this property, it is concluded that existing conditions at

this property already achieve the applicable PCB Performance Standards for residential properties. Therefore, no further response actions are necessary to address PCBs in soils at this property.

3.6 Subsurface Utilities

As part of the PCB soil evaluations conducted for the Phase 2 properties, an evaluation has been made to determine whether soil-related response actions may be needed for existing utilities subject to emergency repair. The available site mapping provided by EPA indicates that there are utilities present throughout the Phase 2 properties. However, since no discrete PCB sample results exceeded 200 ppm, the spatial average concentration for soils within a designated utility band would necessarily be less than the 200 ppm Performance Standard for utility corridors. As a result, it is not necessary to conduct a further evaluation of the need for separate response actions for these utility corridors, and hence there is no need for any soil-related response actions to address PCBs at the Phase 2 properties.

4. Evaluation of Non-PCB Constituents

The non-PCB Appendix IX+3 sampling that was proposed by GE and approved by EPA for the Phase 2 floodplain properties was a limited sampling effort at two previously remediated properties — Parcels I8-4-2, -3, & -4 and Parcel I8-4-101 — designed to assess the need for additional Appendix IX+3 sampling at those properties. The scope of this sampling involved the collection of samples from locations identified by EPA in areas where elevated levels of PCBs had previously been detected and at depths that had not been previously remediated. Only two of the three proposed samples were collected (since the remaining sample location – 2-SB-12 – is within Parcel I8-4-101, to which GE has not been granted access) and the results are provided in Table 3.

GE presented the results of these sampling and analysis activities in its July 1, 2003 sampling summary letter report. As noted in that report, only one constituent (arsenic) was detected at a concentration exceeding the EPA Region 9 Preliminary Remediation Goals (PRGs) for residential soils (Exhibit F-1 of Attachment F to the SOW). However, for this constituent, the sample results are well below the MCP Method 1 S-1 soils standard for arsenic (30 ppm). Thus, the Appendix IX+3 results from Parcels 18-4-2, -3, & -4 do not indicate any exceedances of the applicable standards. Based on these results, as well as the PCB data discussed above, GE concluded in its July 1, 2003 sampling summary report that no additional sampling for non-PCB Appendix IX+3 constituents is necessary at Parcels 18-4-2, -3, &-4 or any other Phase 2 floodplain properties. In its conditional approval letter dated October 20, 2003, EPA concurred with GE's evaluation in the July 1, 2003 sampling summary letter report that non-PCB Appendix IX+3 constituents are not a concern and do not warrant further investigation, but instructed GE to reevaluate that conclusion after the data quality assessment.

GE's data quality assessment for the pre-design non-PCB data is presented in Appendix C and was discussed in Section 2.3 above. As noted there, 100% of the GE pre-design non-PCB data are considered to be usable. Further, nothing in the data quality assessment calls into question GE's and EPA's previous conclusion concerning Appendix IX+3 constituents. Thus, based on the overall quality of the non-PCB data, and consistent with GE's previous evaluation results, non-PCB Appendix IX+3 constituents in soil are not a concern and do not warrant further investigation or other response actions.

This conclusion is consistent with the CD and SOW. The SOW provides (on pages 69-70) that, "[f]or floodplain properties located downstream of the GE Plant Area, where there are intervening potential sources of non-PCB

constituents, GE may exclude from the evaluation [of non-PCB constituents] particular properties (or portions of properties) where response actions are not necessary to address PCBs." In this case, the properties in Phase 2 of the 1½ Mile Floodplain RAAs are located downstream of the GE Plant Area, there are intervening potential sources of non-PCB constituents (e.g., the Lyman Street Area and Former Oxbow Areas A and C), and no response actions are necessary to address PCBs at these properties. In these circumstances, there is no need for additional sampling or evaluation for non-PCB Appendix IX+3 constituents in soil at these properties.

5. Future Activities

As described in this report, for the properties in Phase 2 of the 1½ Mile Floodplain RAAs, no PCB-related response actions are necessary to achieve the applicable Performance Standards, and there is no need for additional sampling or other response actions to address non-PCB Appendix IX+3 constituents at these properties. As a result, no further RD/RA evaluations or submittals are needed for the Phase 2 properties. Rather, this document represents the completion of GE's response actions associated with Phase 2 properties.

Under the CD, upon completion of a given Removal Action, a pre-certification inspection must be conducted and a Final Completion Report and request for Certification of Completion must be submitted. However, the Phase 2 properties addressed in this report comprise only a part of the 1½ Mile Floodplain Removal Actions. Given the phased approach to addressing the 1½ Mile Floodplain RAAs and the fact that this report addresses only the properties in Phase 2, GE will discuss with EPA the appropriate timing for conducting a pre-certification inspection and submitting a Final Completion Report for the Phase 2 properties. In addition, GE will discuss with EPA and the City the appropriate timing for the City to execute an ERE for Parcel 18-4-7.

In the meantime, in response to meetings between EPA and GE, GE submitted to EPA on January 9, 2004, a Phase 3-specific Pre-Design Investigation Work Plan Addendum for all groups (i.e., Groups 3A, 3B, 3C, and 3D) within Phase 3 of the 1½ Mile Floodplain RAAs.

Tables



TABLE 1 PRE-DESIGN POB SOIL DATA

PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGNMEMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS (Rooulds are presented in dry weight parts per million, ppm)

Sample ID Surface/Near-Su 2-SS-1	Diegoth (Fielet)	Date Collected	Arcoclor-1016, -1221, -1232, -1242, -1246	Arosolior-1254	Aroclar-1260	Total PCBs
Surraco/Noar-Su	riace samples	E04E00000	NICYCO OACO	1 10720 0403		^ F4
2-55-1 2-55-2	()-1	5/15/2003 5/15/2003	ND(0.040) ND(0.044)	ND(0.040) ND(0.044)	0.51 0.040 J	0.51 0.040 J
2-SS-3	C)-1	5/15/2003	ND(0.041)	ND(0.041)	1.2	1.2
2-88-4		5/15/2003	ND(0.042)	ND(0.041) ND(0.042)	0.43	0.43
2-55- 1 2-55-5	C)-1	5/15/2003	ND(0.039)	ND(0.042) ND(0.039)	0.036 J	0.036 J
<u>4-55-9</u> 2-SS-6	0-1 0-1	5/15/2003	ND(0.040)	0.089	0.036 3	
2-SS-7		5/15/2003		<u> </u>	~	0.144
<u>4-55-7</u> 2-88-8	Gk-11	5/15/2003	ND(0.20) [ND(0.44)]	2.0 [ND(0.44)]	2 0 [3,2]	4.0 [3 2]
<u>2-55-6</u> 2-88-9	0-1 0-1	5/15/2003	ND(2.1) ND(0.040)	15 ND(0.040)	20 0.032 J	35
2-55-10	0-1	5/15/2003		,	0.0323	0.032 J
		5/15/2003	ND(0.039)	ND(0.039)		0.1.2
2-SS-11 2-SS-12	0-1 0-1	5/15/2003	ND(0.040) ND(3.9)	0.072 ND(3.9)	0.14 50	0.212 50
z-55-12 Soil Boring Sam	Julius I	3/13/2003	[412] (3), \$)	ND(3.9)	30	20
			h Uracea ea e e e			
2-SB-1	0-1	5/22/2003	ND(0.040)	0.76	0.43	1.19
	1-3	5/22/2003	ND(0.41)	2.4	3.0	5. ·4.
	3-5	5/22/2003	ND(0.048)	0.22	0.22	0.44
A 5.5. A	5-7	5/22/2003	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)
2-SB-2	0-1	5/22/2003	NID(0.040)	0.025 J	0.035 J	0.060 J
	1-3	5/22/2003	ND(0.041)	0.23	0.16	0.39
	3-5	5/22/2003	ND(0.049)	ND(0.049)	0.16	0.16
	5-7	5/22/2003	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
2-SB-3	0-1	5/22/2003	NE(0.44)	ND(0.44)	6.1	6.1
	1-3	5/22/2003	ND(0.041)	NID(0.041)	0.18	0.18
	3-5	5/22/2003	NE(0.045)	ND(0.045)	ND(0.045)	ND(0.045)
2-SB-4	□-1	5/23/2003	ND(0.043)	NID(0.043)	0.44	0.4.4
	1-3	5/23/2003	ND(0.04-5)	NID(0.045)	0.10	0.10
~~~44***	3-5	5/23/2003	ND(0.03/9/)	ND(0.039)	ND(0.039)	ND(0.039)
2-SB-5	0-1	5/23/2003	NICH(O.290)	0.93	1.4	2.33
	1-3	5/23/2003	ND(0.21) [ND(0.041)]	0.88 [0.79]	1.4 [1.0]	2.28 [1.79]
	35	5/23/2003	NC(0,0448)	ND(0.046)	ND(0.046)	ND(0.046)
2-SB-6	0-1	5/23/2003	ND(0.043)	0.23	0.26	0.49
	1-3	5/23/2003	ND(0.045)	0.037 J	0.031 J	0.068 J
	3-5	5/23/2003	ND(0,039)	0.032 J	ND(0.039)	0.032 J
2-SB-7	315	5/23/2003	NE(0.42)	ND(0.42)	3.7	3.7
	6-10	5/23/2003	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
2-SB-8	36	5/27/2003	ND(0.039)	ND(0.039)	0.063	0.063
	6-10	5/27/2003	ND(0:040)	ND(0.040)	ND(0.040)	ND(0.040)
	10-15	5/27/2003	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
2-SB-9	316	5/27/2003	ND(0.040)	ND(0.040)	0.074	0.074
	6-10	5/27/2003	ND(0.040) [ND(0.039)]	MD(0.040) [MD(0.039)]	ND(0.040) [ND(0.039)]	ND(0.040) [ND(0.039)]
	10-15	5/27/2003	N(D(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
2-SB-10	36	5/27/2003	ND(0.38)	ND(0.38)	4.4	4.4
	610	5/27/2003	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
2-SB-11	3-6	5/27/2003	ND(0.036)	ND(0.036)	0.078	0.078
	6-10	5/27/2003	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
	10-12:	5/27/2003	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
2-SB-13	3-5	5/27/2003	ND(0.061)	NID(0.061)	0.097	0.097
	57'	5/27/2003	ND(0:055)	ND(0.055)	ND(0.055)	ND(0.055)
2-SB-14	5-7	5/23/2003	ND(0.03/8)	0.027 J	ND(0.038)	0.027 J
	79	5/23/2003	ND(0.037)	0.039	ND(0.037)	0.039
2-SB-15	45	5/23/2003	ND(0.03/8)	0.032 J	ND(0.038)	0.032 J
	68	5/23/2003	ND(0.043)	0.053	ND(0,043)	0.053
2-\$B-16		5/23/2003	NE(0,19)	ND(0.19)	2.0	2.0
	1-3	5/23/2003	ND(0.040)	0.099	0.12	0.219
	3-5	5/23/2003	ND(0,040)	0.027 J	ND(0.040)	0.027 J

#### Notes:

- 1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to CT&E Environmental Services, Inc. for analysis of PCBs.
- 2. ND Amalyte was not detected. The number in parentheses is the associated detection limit.
- 3. Field duplicate sample results are presented in brackets.

#### Data Qualifiers:

J - Indicates an estimated value less than the practical quantitation limit (PCL).

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	(Feet)	Total PCBs
BW0058A	07/07/98	0.0 - 0.08	1.2
BW0059A	07/07/98	0.0 - 0.08	11
BW0060A	07/07/98	0.0 - 0.08	3,4
18-4-1-1	06/28/95	0 - 0.5	0.59
	06/28/95	0.5 - 1	0.31
[8-4-1-2	06/28/95	0 - 0.5	See Note 4
	06/28/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	See Note 4
	09/05/95	1.5 - 2	See Note 4
	09/05/95	2 - 2.5	See Note 4
	09/05/95	2.5 - 3	See Note 4
	09/29/95	3 - 3.5	1.79
	09/29/95	3.5 - 4	1.1
	09/29/95	4 - 4.5	3.75
	09/29/95	4.5 - 5	0.708
I8-4-1-3	06/28/95	0 - 0.5	See Note 4
	06/28/95	0.5 - 1	See Note 4
18-4-1-4	09/05/95	0 - 0.5	See Note 4
!	09/05/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	See Note 4
	09/05/95	1.5 - 2	0.129[0.130]
	09/05/95	2 - 2.5	0.698
18-4-1-5	09/05/95	0 - 0.5	See Note 4
	09/05/95	0.5 - 1	2.22
	09/05/95	1 - 1.5	1.27
	09/05/95	1.5 - 2	0.289
	09/05/95	2 - 2.5	0.251
8-4-1-6	09/05/95	0 - 0.5	0.838
	09/05/95	0.5 - 1	1.47
	09/05/95	1 - 1.5	0.853
	09/05/95	1.5 - 2	0.676
18-4-1-7	09/05/95	0 - 0.5	See Note 4
	09/05/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	91.3
	09/05/95	1.5 - 2	3.2.3
	09/05/95	2 - 2.5	43.8
	09/05/95	2.5 - 3	29.4
	09/29/95	3 - 3.5	15.8
	09/29/95	3.5 - 4	11.6
	09/29/95	4 - 4.5	2.4
	09/29/95	4.5 - 5	7.75

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample 1D	Date Collected	Depth (Feet)	Total PCBs
8-4-1-8	09/06/95	0 - 0.5	See Note 4
	09/06/95	0.5 - 1	See Note 4
	09/06/95	1 - 1.5	24.3
	09/06/95	1.5 - 2	3.34
	09/06/95	2 - 2.5	39.3
	09/06/95	2.5 - 3	11.8
	09/29/95	3 - 3.5	4.57
	09/29/95	3.5 - 4	0.677
	09/29/95	4 - 4.5	0.224
18-4-1-9	09/29/95	0 - 0.5	See Note 4
	09/29/95	0.5 - 1	See Note 4
	09/29/95	1 - 1.5	1.17
	09/29/95	1.5 - 2	0.435
	09/29/95	2 - 2.5	0.408
	09/29/95	2.5 - 3	0.356
18-4-1-10	09/29/95	0 - 0.5	See Note 4
	09/29/95	0.5 - 1	See Note 4
	09/29/95	1 - 1.5	1.03
	09/29/95	1.5 - 2	0.148
	09/29/95	2 - 2.5	ND(0.1)
	09/29/95	2.5 - 3	0.223
18-4-1-11	09/29/95	0 - 0.5	See Note 4
	09/29/95	0.5 - 1	See Note 4
	09/29/95	1 - 1.5	0.638
	09/29/95	1.5 - 2	0.99J[0.576J]
	09/29/95	2 - 2.5	0.889
	09/29/95	2.5 - 3	1.04
18-4-1-12	10/23/95	0 - 0.5	1.29
	10/23/95	0.5 - 1	0.947
	10/23/95	1 - 1.5	0.186
18-4-2,3,4-1	06/28/95	0 - 0.5	See Note 4
	06/28/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	See Note 4
	09/05/95	1.5 - 2	See Note 4
	09/05/95	2 - 2.5	See Note 4
	09/05/95	2.5 - 3	See Note 4
	09/27/95	3 - 3.5	12.4
	09/27/95	3.5 - 4	1.84
	09/27/95	4 - 4.5	3.12
	09/27/95	4.5 - 5	0.829

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-2,3,4-2	06/28/95	0 - 0.5	See Note 4
	06/28/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	See Note 4
	09/05/95	1.5 - 2	1.44
	09/05/95	2 - 2.5	1.37
	09/05/95	2.5 - 3	3.45
18-4-2,3,4-3	06/28/95	0 - 0.5	0.64
	06/28/95	0.5 - 1	0.25
18-4-2,3,4-4	09/01/95	0 - 0.5	0.128
	09/01/95	0.5 - 1	ND(0.1)
18-4-2,3,4-5	09/01/95	0 - 0.5	0.716
	09/01/95	0.5 - 1	0.462
	09/01/95	1 - 1.5	0.349
	09/01/95	1.5 - 2	0.146
18-4-2,3,4-6	09/01/95	0 - 0.5	See Note 4
	09/01/95	0.5 - 1	See Note 4
	09/01/95	1 - 1.5	See Note 4
	09/01/95	1.5 - 2	See Note 4
	09/01/95	2 - 2.5	See Note 4
	09/01/95	2.5 - 3	4.64
	09/27/95	3 - 3.5	8.2
	09/27/95	3.5 - 4	1.3
	09/27/95	4 - 4.5	0.129
	09/27/95	4.5 - 5	0.594
18-4-2,3,4-7	09/05/95	0 - 0.5	See Note 4
	09/05/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	See Note 4
	09/05/95	1.5 - 2	See Note 4
	09/05/95	2 - 2.5	See Note 4
	09/05/95	2.5 - 3	See Note 4
18-4-2,3,4-8	09/05/95	0 - 0.5	See Note 4
	09/05/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	0.724
	09/05/95	1.5 - 2	ND(0.1)

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-2,3,4-9	09/05/95	0 - 0.5	See Note 4
	09/05/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	See Note 4
	09/05/95	1.5 - 2	3.33
	09/05/95	2 - 2.5	3.54
	09/05/95	2.5 - 3	4.87
	09/27/95	3 - 3.5	0.18
	09/27/95	3.5 - 4	3.85
	09/27/95	4 - 4.5	0.563
	09/27/95	4.5 - 5	1.23
18-4-2,3.4-10	09/05/95	0 - 0.5	See Note 4
, .	09/05/95	0.5 - 1	See Note 4
	09/05/95	1 - 1.5	See Note 4
	09/05/95	1.5 - 2	See Note 4
	09/05/95	2 - 2.5	See Note 4
	09/05/95	2.5 - 3	See Note 4
	10/02/95	3 - 3.5	See Note 4
	10/02/95	3.5 - 4	See Note 4
	10/02/95	4 - 4.5	1.19
	10/02/95	4.5 - 5	4.91
18-4-2,3,4-11	09/01/95	0 - 0.5	0.204[0.192]
	09/01/95	0.5 - 1	0.327
18-4-2,3,4-12	09/28/95	0 - 0.5	See Note 4
10 7 44,07,1 1144	09/28/95	0.5 - 1	See Note 4
	09/28/95	1 - 1.5	0.408
	09/28/95	1.5 - 2	0.116
	09/28/95	2 - 2.5	1.17
	09/28/95	2.5 - 3	0.5
18-4-2,3,4-13	09/28/95	0 - 0.5	See Note 4
10 -1 20,0,1	09/28/95	0.5 - 1	See Note 4
	09/28/95	1 - 1.5	ND(0.1)
	09/28/95	1.5 - 2	ND(0.1)
18-4-2,3,4-14	09/28/95	0 - 0.5	See Note 4
11 Commercial, 10 Commercial	09/28/95	0.5 - 1	See Note 4
	09/28/95	1 - 1.5	ND(0.1)
	09/28/95	1.5 - 2	ND(0.1)
	09/28/95	2 - 2.5	0.112
	09/28/95	2 - 2.5	ND(0.1)
18-4-2,3,4-15	09/28/95	<u> </u>	_/buududunuunuunuunuunuunuunuunuunuunuunuun
#C###44,0,4110	l I	0.5 - 1	0.698 [0.792]
	09/28/95		0.193 NCV0.15
	09/28/95	1 - 1.5	ND(0.1)
	09/28/95	1.5 - 2	ND(0.1)

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-2,3,4-16	10/23/95	0 - 0.5	See Note 4
	10/23/95	0.5 - 1	See Note 4
	10/23/95	1 - 1.5	0.173
18-4-2,3,4-17	10/23/95	0 - 0.5	See Note 4
	10/23/95	0.5 - 1	See Note 4
	10/23/95	1 - 1.5	See Note 4
18-4-2,3,4-18	10/23/95	0 - 0.5	See Note 4
	10/23/95	0.5 - 1	See Note 4
	10/23/95	1 - 1.5	0.185
8-4-2,3,4-19	10/23/95	0 - 0.5	See Note 4
	10/23/95	0.5 - 1	See Note 4
	10/23/95	1 - 1.5	ND(0.1)
18-4,2,3,4-20	10/23/95	0 - 0.5	See Note 4
	10/23/95	0.5 - 1	See Note 4
	10/23/95	1 - 1.5	See Note 4
	10/23/95	1.5 - 2	See Note 4
	10/23/95	2 - 2.5	See Note 4
	10/23/95	2.5 - 3	See Note 4
	10/23/95	3 - 3.5	See Note 4
	10/23/95	3.5 - 4	4.87
18-4-5-1	06/28/95	0 - 0.5	0.48
	06/28/95	0.5 - 1	0.63
18-4-5-2	06/28/95	0 - 0.5	0.13
	06/28/95	0.5 - 1	0.61
18-4-5-3	06/28/95	0 - 0.5	0.19
	06/28/95	0.5 - 1	0.28
18-4-5-4	10/23/95	0 - 0.5	11.4 [12.7]
	10/23/95	0.5 - 1	10.7
	10/23/95	1 - 1.5	0.281
	10/23/95	1.5 - 2	22.1
	10/23/95	2 - 2.5	1.34
	10/23/95	2.5 - 3	ND(0.1)
18-4-5-5	10/24/95	0 - 0.5	0.343
	10/24/95	0.5 - 1	0.266
18-4-5-6	10/24/95	0 - 0.5	6.62[6.7]
	10/24/95	0.5 - 1	0.909
,	10/24/95	1 - 1.5	0.292
18-4-5-7	11/29/95	0 - 0.5	3.08
	1 1/2 9/9 5	0.5 - 1	7.55
	11/29/95	1 - 1.5	6.26
	11/29/95	1.5 - 2	0.787
	11/29/95	2 - 2.5	5.04
	11/29/95	2.5 - 3	ND(0.1)

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-5-8	11/29/95	0 - 0.5	11.3[17.7]
	11/29/95	0.5 - 1	1.37
	11/29/95	1 - 1.5	0.148
	11/29/95	1.5 - 2	0.258
18-4-5-9	11/29/95	0 - 0.5	1.59
	11/29/95	0.5 - 1	5.28
	11/29/95	1 - 1.5	0.773
	11/29/95	1.5 - 2	0.512
18-4-5-10	11/29/95	0 - 0.5	0.102[0.274]
	11/29/95	0.5 - 1	ND(0.1)
18-4-5-11	11/29/95	0 - 0.5	ND(0.1)
	11/29/95	0.5 - 1	ND(0.1)
18-4-5-12	03/01/96	0 - 0.5	0.498
	03/01/96	0.5 - 1	2.19
	03/01/96	1 - 1.5	2.43
	03/01/96	1.5 - 2	0.413
	03/01/96	2 - 2.5	0.629
18-4-6-1	05/10/96	0 - 0.5	ND(0.1)
18-4-6-2	05/10/96	0 - 0.5	ND(0.1)[(ND(0.1)]
18-4-7-1	06/28/95	0 - 0.5	See Note 4
	06/28/95	0.5 - 1	See Note 4
	09/06/95	1 - 1.5	See Note 4
	09/06/95	1.5 - 2	See Note 4
	09/06/95	2 - 2.5	See Note 4
	09/06/95	2.5 - 3	See Note 4
	09/27/95	3 - 3.5	32.3
	09/27/95	3.5 - 4	114
	09/27/95	4 - 4.5	19.1
	09/27/95	4.5 - 5	6.3
	10/03/95	5 - 5.5	23.7
	10/03/95	5.5 - 6	9.3
18-4-7-2	09/27/95	0 - 0.5	See Note 4
	09/27/95	0.5 - 1	See Note 4
	09/27/95	1 - 1.5	See Note 4
	09/27/95	1.5 - 2	See Note 4
	09/27/95	2 - 2.5	See Note 4
	09/27/95	2.5 - 3	See Note 4
	09/27/95	3 - 3.5	12.8
	09/27/95	3.5 - 4	71.5
	09/27/95	4 - 4.5	12.2
	09/27/95	4.5 - 5	1.26
	10/03/95	5 - 5.5	140[190]
	10/03/95	5.5 - 6	80.2

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-7-3	06/28/95		See Note 4
	06/28/95	0.5 - 1	See Note 4
	09/06/95	1 - 1.5	See Note 4
	09/06/95	1.5 - 2	See Note 4
	09/06/95	2 - 2.5	See Note 4
	09/06/95	2.5 - 3	See Note 4
	09/27/95	3 - 3.5	See Note 4
	09/27/95	3.5 - 4	40.6
	09/27/95	4 - 4.5	43.1
	09/27/95	4.5 - 5	56.1
	10/03/95	5 - 5.5	6.79
	10/03/95	5.5 - 6	60
1.847'4	09/06/95	0 - 0.5	See Note 4
	09/06/95	0.5 - 1	See Note 4
	09/06/95	1 - 1.5	See Note 4
	09/06/95	1.5 - 2	See Note 4
	09/06/95	2 - 2.5	See Note 4
	09/06/95	2.5 - 3	See Note 4
	09/27/95	3 - 3.5	See Note 4
	09/27/95	3.5 - 4	83.2
	09/27/95	4 - 4.5	11.5
	09/27/95	4.5 - 5	2.47
	10/03/95	5 - 5.5	13.5
	10/03/95	5.5 - 6	3.22
18-4-7-5	09/06/95	0 - 0.5	See Note 4
	09/06/95	0.5 - 1	See Note 4
	09/06/95	1 - 1.5	See Note 4
	09/06/95	1.5 - 2	See Note 4
	09/06/95	2 - 2.5	See Note 4
	09/06/95	2.5 - 3	See Note 4
	09/27/95	3 - 3.5	See Note 4
	09/27/95	3.5 - 4	42.5
	09/27/95	4 - 4.5	19.2
	09/27/95	4.5 - 5	25.8
	10/03/95	5 - 5.5	60.8
	10/03/95	5.5 - 6	11.9
	10/00/00	J', U ** U	11.0

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-7-6	09/06/95	0 - 0.5	See Note 4
	09/06/95	0.5 - 1	See Note 4
	09/06/95	1 - 1.5	See Note 4
	09/06/95	1.5 - 2	See Note 4
	09/06/95	2 - 2.5	See Note 4
	09/06/95	2.5 - 3	See Note 4
	09/06/95	3 - 3.5	See Note 4
	09/27/95	3 - 3.5	See Note 4
	09/27/95	3,5 - 4	See Note 4
	09/27/95	4 - 4.5	196
	09/27/95	4.5 - 5	2.19
	10/03/95	5 - 5.5	1.08[1.04]
	10/03/95	5.5 - 6	0.182
18-4-7-7	03/05/96	0 - 0.5	6.02
	03/05/96	0.5 - 1	3.13
	03/05/96	1 - 1.5	11.4
	03/05/96	1.5 - 2	9.57
	03/05/96	2 - 2.5	66.9
	03/05/96	2.5 - 3	31
18-4-7-8	03/05/96	0 - 0.5	0.442
	03/05/96	0.5 - 1	0.275
	03/05/96	1 - 1.5	ND(0.1)
	03/05/96	1.5 - 2	ND(0.1)
18-4-7-9	03/05/96	0 - 0.5	5.23
	03/05/96	0.5 - 1	4.55[4.84]
	03/05/96	1 - 1.5	0.611
	03/05/96	1.5 - 2	1.05
	03/05/96	2 - 2.5	0.426
18-4-7-10	03/04/96	0 - 0.5	2.71
	03/04/96	0.5 - 1	2.1
	03/04/96	1 - 1.5	4.45
	03/04/96	1.5 - 2	23.6
	03/04/96	2 - 2.5	34.7
	03/04/96	2.5 - 3	7.84
18-4-7-11	03/04/96	0 - 0.5	4.64
	03/04/96	0.5 - 1	13.3
	03/04/96	1 - 1.5	26.1
	03/04/96	1.5 - 2	59.5
	03/04/96	2 - 2.5	8.99
	03/04/96	2.5 - 3	8.66

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

Sample ID	Date Collected 💀	Depth (Feet)	Total PCBs
18-4-7-12	03/04/96	0 - 0.5	See Note 4
	03/04/96	0.5 - 1	See Note 4
	03/04/96	1 - 1.5	See Note 4
	03/04/96	1.5 - 2	See Note 4
	03/04/96	2 - 2.5	100
	03/04/96	2.5 - 3	38.7
18-4-7-13	03/04/96	0 - 0.5	See Note 4
	03/04/96	0.5 - 1	See Note 4
	03/04/96	1 - 1.5	See Note 4
	03/04/96	1.5 - 2	See Note 4
	03/04/96	2 - 2.5	73.1
	03/04/96	2.5 - 3	24.5
18-4-7-14	03/04/96	0 - 0.5	3.14
	03/04/96	0.5 - 1	2.52
	03/04/96	1 - 1.5	2.49
	03/04/96	1.5 - 2	4.66
	03/04/96	2 - 2.5	0.925
	03/04/96	2.5 - 3	1.54
18-4-7-15	03/04/96	0 - 0.5	See Note 4
	03/04/96	0.5 - 1	See Note 4
	03/04/96	1 - 1.5	11.4
	03/04/96	1.5 - 2	3.92
	03/04/96	2 - 2.5	7.69
	03/04/96	2.5 - 3	6.24
18-4-7-16	03/01/96	0 - 0.5	2.75
	03/01/96	0.5 - 1	7.57
	03/01/96	1 - 1.5	5.08
	03/01/96	1.5 - 2	1.47[1.81]
	03/01/96	2 - 2.5	1.22
	03/01/96	2.5 - 3	0.324
18-4-7-17	04/02/96	0 - 0.5	See Note 4
	04/02/96	0.5 - 1	See Note 4
	04/02/96	1 - 1.5	See Note 4
	04/02/96	1.5 - 2	See Note 4
	04/02/96	2 - 2.5	See Note 4
	04/02/96	2.5 - 3	See Note 4
	04/02/96	3 - 3.5	See Note 4
	04/02/96	3.5 - 4	0.649
	04/04/96	4 - 4.5	1.24
	04/04/96	4.5 - 5	1.00
	04/04/96	5 - 5.5	8.83
	04/04/96	5.5 - 6	0.445
	04/04/96	6 - 6.5	0.164

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-7-18	04/02/96	0 - 0.5	See Note 4
	04/02/96	0.5 - 1	See Note 4
	04/02/96	1 - 1.5	See Note 4
	04/02/96	1.5 - 2	See Note 4
	04/02/96	2 - 2.5	See Note 4
	04/02/96	2.5 - 3	See Note 4
	04/02/96	3 - 3.5	See Note 4
	04/02/96	3.5 - 4	11.8
	04/04/96	4 - 4.5	39.7
	04/04/96	4.5 - 5	0.431
	04/04/96	5 - 5.5	0.67
	04/04/96	5.5 - 6	0.466[0.753]
18-4-7-19	04/02/96	0 - 0.5	See Note 4
	04/02/96	0.5 - 1	See Note 4
	04/02/96	1 - 1.5	See Note 4
	04/02/96	1.5 - 2	See Note 4
	04/02/96	2 - 2.5	See Note 4
	04/02/96	2.5 - 3	See Note 4
	04/02/96	3 - 3.5	See Note 4
	04/02/96	3.5 - 4	1.32
	04/04/96	4 - 4.5	19.8
	04/04/96	4.5 - 5	0.207
	04/04/96	5 - 5.5	0.354
	04/04/96	5.5 - 6	ND(0.1)
18-4-7-20	04/04/96	0 - 0.5	See Note 4
	04/04/96	0.5 - 1	See Note 4
	04/04/96	1 - 1.5	See Note 4
	04/04/96	1.5 - 2	See Note 4
1	04/04/96	2 - 2.5	See Note 4
	04/04/96	2.5 - 3	See Note 4
:	04/04/96	3 - 3.5	108
	04/04/96	3.5 - 4	57.4
	04/04/96	4 - 4.5	1.81
	04/04/96	4.5 - 5	0.392
	04/04/96	5 - 5.5	0.611
	04/04/96	5.5 - 6	ND(0.1)

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
[8-4-7-21	04/04/96	0 - 0.5	See Note 4
	04/04/96	0.5 - 1	See Note 4
	04/04/96	1 - 1.5	See Note 4
	04/04/96	1.5 - 2	See Note 4
	04/04/96	2 - 2.5	See Note 4
	04/04/96	2.5 - 3	See Note 4
	04/04/96	3 - 3.5	1.99
	04/04/96	3.5 - 4	6.58
	04/04/96	4 - 4.5	3.64
	04/04/96	4.5 - 5	1.3
	04/04/96	5 - 5.5	105
	04/04/96	5.5 - 6	25
	04/04/96	6 - 6.5	61.1
	04/04/96	6.5 - 7	22.9
	04/04/96	7 - 7.5	7.64
	04/04/96	7.5 - 8	0.16
	04/04/96	8 - 8.5	0.349
	04/04/96	8.5 - 9	0.263
18-4-7-22	07/02/96	0 - 0.5	See Note 4
	07/02/96	0.5 - 1	See Note 4
	07/02/96	1 - 1.5	See Note 4
	07/02/96	1.5 - 2	See Note 4
	07/02/96	2 - 2.5	700
	07/02/96	2.5 - 3	6.8
18-4-7-23	07/02/96	0 - 0.5	See Note 4
	07/02/96	0.5 - 1	See Note 4
	07/02/96	1 - 1.5	See Note 4
	07/02/96	1.5 - 2	See Note 4
	07/02/96	2 - 2.5	See Note 4
	07/02/96	2.5 - 3	See Note 4
18-4-7-24	07/02/96	0 - 0.5	See Note 4
	07/02/96	0.5 - 1	See Note 4
	07/02/96	1 - 1.5	See Note 4
	07/02/96	1.5 - 2	See Note 4
	07/02/96	2 - 2.5	See Note 4
	07/02/96	2.5 - 3	See Note 4
18-4-7-25	07/02/96	0 - 0.5	See Note 4
	07/02/96	0.5 - 1	See Note 4
	07/02/96	1 - 1.5	See Note 4
	07/02/96	1.5 - 2	See Note 4
	07/02/96	2 - 2.5	See Note 4
	07/02/96	2.5 - 3	See Note 4

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID	Date Collected	Depth (Feet)	Total PCBs
18-4-7-26	07/02/96	0 - 0.5	1,49
	07/02/96	0.5 - 1	1.80
	07/02/96	1 - 1.5	1.41
	07/0:2/96	1.5 - 2	1.82
	07/02/96	2 - 2.5	0.826
	07/02/96	2.5 - 3	0.139
R55A000	01/06/99	0 - 0.5	0.4J
	01/06/99	0.5 - 1	ND(0.6)
	01/06/99	1 - 1.5	ND(0.5)
	01/06/99	1.5 - 2	ND(0.6)
R55A025	01/06/99	0 - 0.5	ND(0.5)[0.12]
	01/06/99	0.5 - 1	ND(0.5)
	01/06/99	1 - 1.5	ND(0.6)
	01/06/99	1.5 - 2	ND(0.7)
R55A050	01/06/99	0 - 0.5	ND(0.6)
	01/06/99	0.5 - 1	ND(0.5)
	01/06/99	1 - 1.5	ND(0.6)
	01/06/99	1.5 - 2	ND(0.5)
R55B000	01/06/99	0 - 0.5	0.3J
	01/06/99	0.5 - 1	ND(0.5)[ND(0.11)]
	01/06/99	1 - 1.5	ND(0.5)
	01/06/99	1.5 - 2	ND(0.5)
R55B050	01/06/99	0 - 0.5	ND(0.6)
	01/06/99	0.5 - 1	ND(0.5)
	01/06/99	1 - 1.5	ND(0.6)
	01/06/99	1.5 - 2	ND(0.7)
R55B075	01/06/99	0 - 0.5	ND(0.7)
	01/06/99	0.5 - 1	ND(0.6)
	01/06/99	1 - 1.5	ND(0.5)[ND(0.11)]
	01/06/99	1.5 - 2	0.2J
R55C000	01/06/99	0 - 0.5	ND(0.6)
	01/06/99	0.5 - 1	0.2J
	01/06/99	1 - 1.5	ND(0.5)
	01/06/99	1.5 - 2	ND(0.5)
R55C025	01/06/99	0 - 0.5	ND(0.6)
	01/06/99	0.5 - 1	ND(0.5)
	01/06/99	1 - 1.5	ND(0.5)
	01/06/99	1.5 - 2	ND(0.1)[ND(0.5)]
R55C050	01/06/99	0 - 0.5	ND(0.6)
	01/06/99	0.5 - 1	ND(0.5)
	01/06/99	1 - 1.5	ND(0.6)
	01/06/99	1.5 - 2	ND(0.7)

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

## GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS (Results are presented in dry weight parts per million, ppm)

Sample ID	Date Collected	Depth (Feet)	Total PCBs
R55C075	01/06/99	0 - 0.5	ND(0.6)[ND(0.13)]
	01/06/99	0.5 - 1	ND(0.5)
	01/06/99	1 - 1.5	ND(0.5)
	01/06/99	1.5 - 2	0.3J
R55C100	01/06/99	0 - 0.5	ND(0.5)
RB021301	11/10/98	0 - 0.5	4.83
	11/10/98	1 - 1.5	10.8
RB021302	11/10/98	0 - 0.5	12.5J
	11/10/98	1 - 1.5	20
RB021303	11/10/98	0 - 0.5	4.88J

### Notes:

- Sample data obtained from USEPA database entitled "040403_usepa_hr_dbase1.mdb" and GE database entitled "hr0409031.mdb".
- 2. ND(0.1) Analyte was not detected. The number in parentheses is the associated detection limit.
- 3. Duplicate sample results are presented in brackets.
- 4. A Short Term Measure or an Immediate Response Action was previously performed at this parcel under MDEP oversight. Soil was removed at this depth and clean backfill was placed at these locations.

### Data Qualifiers:

### Organics

J - Indicates an estimated value less than the practical quantitation limit (PQL).

### TABLE 3 PRE-DESIGN NON-POB APPENDED DOS SOIL DATA

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

	Sample ID:	2-SB-14	2-SB-15
	Sample Depth (Feet):	6-7	4.46
Pia rainnetier	Darte Collected:	05/23/03	05/23/03
Volatile Organics			
None Detected		***	
Semivolatile Organi	ics		.,
None Detected		***	
Furans		***************************************	
2,3,7,8-TCDF		ND(0.0000014)	ND(0.0000013) [ND(0.0000013)]
TCDFs (total)		ND(0.0000014)	ND(0.0000013) [ND(0.0000013)]
1,2,3,7,8-PeCDF		ND(0.0000028)	ND(0.0000028) [0.0000014 J]
2,3,4,7,8-PeCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000011) X]
PeCDFs (total)		ND(0.0000028)	0.0000013 [0.0000014]
1,2,3,4,7,8-HxCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000017) X]
1,2,3,6,7,8-HxCDF		ND(0.0000028)	ND(0.0000028) [0.0000015 J]
1,2,3,7,8,9-HxCDF		MD(0.0000028)	ND(0.0000028) [ND(0.0000024) X]
2,3,4,6,7,8-HxCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000015) X]
HxCDFs (total)		ND(0.0000028)	ND(0.0000028) [0.0000015]
1,2,3,4,6,7,8-HpCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000033) X]
1,2,3,4,7,8,9-HpCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000030)]
HpCDFs (total)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ND(0.0000028)	ND(0.0000028) [ND(0.0000030)]
OCDF		MD(0.0000055)	ND(0.0000060) [ND(0.0000052) X]
Dioxins			
2,3,7,8-TCDD		ND(0.0000019)	ND(0.0000017) [ND(0.0000018)]
TCDDs (total)		ND(0.0000022)	ND(0.0000024) [ND(0.0000024)]
1,2,3,7,8-PeCDD		ND(0.0000028)	ND(0.0000028) [ND(0.0000030)]
PeCDDs (total)		ND(0.0000033)	ND(0.0000037) [ND(0.0000039)]
1,2,3,4,7,8-HxCDD		ND(0.0000028)	ND(0.0000028) [ND(0.0000030)]
1,2,3,6,7,8-HxCDD		ND(0.0000028)	ND(0.0000028) [ND(0.0000030)]
1,2,3,7,8,9-HxCDD		ND(0.0000028)	ND(0.0000028) [0.0000020 J]
HtcCDDs (total)		ND(0.0000028)	ND(0.0000046) [0.0000020]
1,2,3,4,6,7,8-HpCDD		ND(0.0000028)	0.0000019 J [ND(0.0000032) X]
HipCDDs (total) OCDD		ND(0.0000028)	0.0000019 [ND(0.0000031)]
Total TEQs (VVHO TI Inorganics	: (E es );	ND(0.000011) X - 4.0000042	0.000011 J [ND(0.000012) X] 0.0000041 [0.0000038]
Tenangan tenangan (1997-1997-1997-1997-1997-1997-1997-1997	1 -3 /-		J. 63.000-71 [J. 6000-600]
A rabbiert et east		0.820 B	1 EO D INDAG CON
Antimony Ansenic			1.50 B [ND(6.00)] 7.10 [8.20]
Barium		8.80 40.0	42.0 [40.0]
Beryllium		0.450 B	0.430 B [0.480 B]
Cadmium		0.240 B	0.140 B [0.140 B]
Chromium		9.40	9.60 [10.0]
Cobalt		15.0	13.0 [15.0]
Copper		28.0	15.0 [25.0]
Cyanide		ND(0.460)	0.0570 B [0.0440 B]
Lead		12.0	8.60 [9.40]
Mercury	***************************************	0.0280 B	0.0530 B [0.0740 B]
Nickel		26.0	20.0 [27.0]
Selenium		ND(1.00)	1.10 [ND(1.00)]
Silver	***************************************	0.140 B	0.160 B [0.180 B]
Sulfide		40.0	7.40 [7.90]
Thallium		ND(1.10)	1.40 [ND(1.20)]
Tin		3.00 B	4.60 B [4.00 B]
Va⊓adium		8.20	9.40 [8.70]
Zinc		79.0	89.0 [82.0]

### TABLE 3 PRE-DESIGN NON-PCB APPENDIX DC+3 SOIL DATA

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS (Results are presented in dry weight parts per million, ppm)

#### Notes:

- Samples were collected by Blasiland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of Appendix IX+3 constituents.
- 2. ND Analyte was not detected. The number in parentheses is the associated detection limit.
- Total 2,3,7,8-TCDD toxicity equivalents (TEGs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2).
- 4. With the exception of dioxin/furans, only those constituents detected in one or more samples are summarized
- 5. -- Indicates that all constituents for the parameter group were not detected.
- 6. Field duplicate sample results are presented in brackets.

### Data Qualifiers:

### Organics (volatiles, semivolatiles, dioxin/furans)

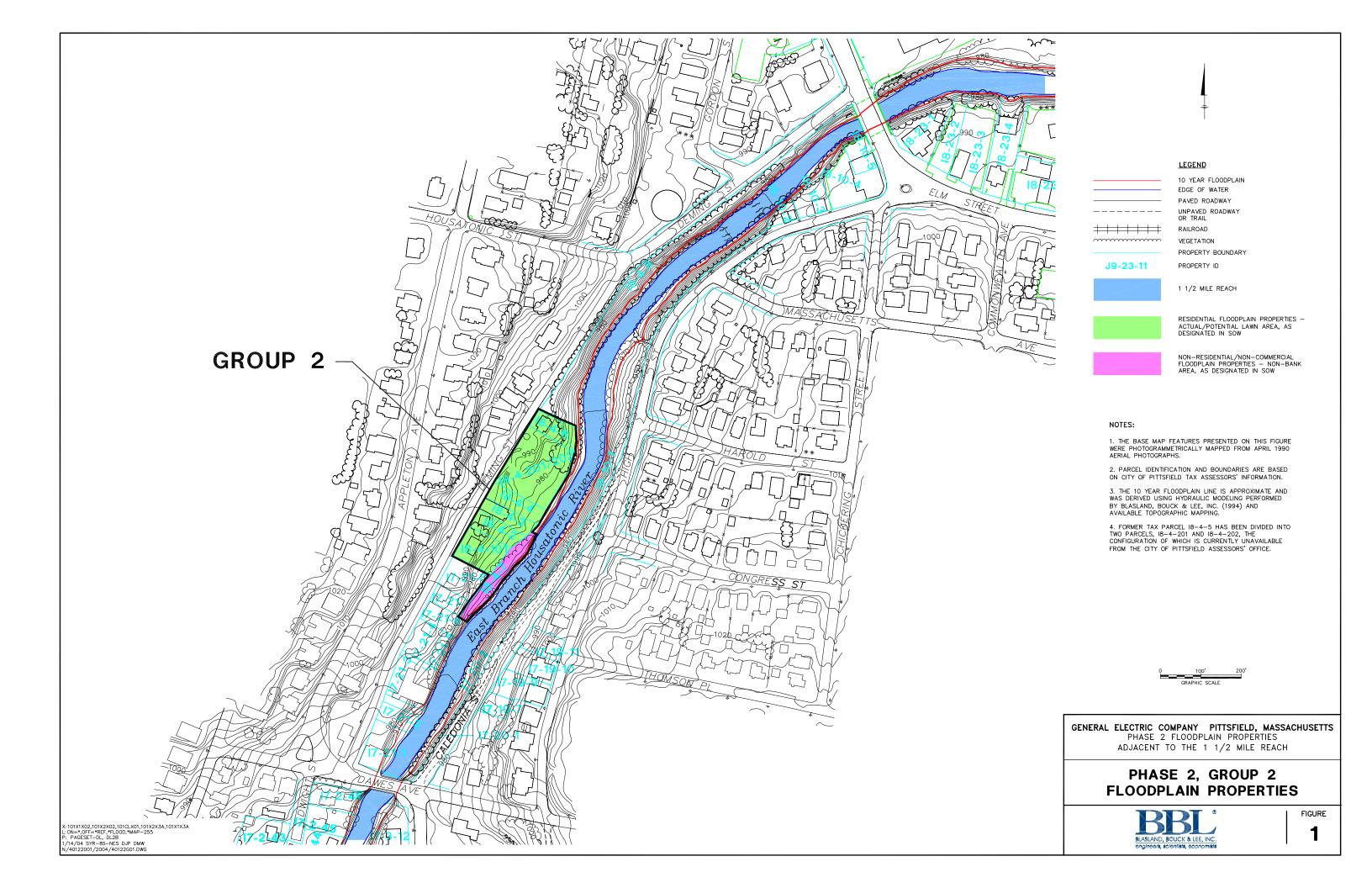
- Ji- Indicates an estimated value less than the practical quantitation limit (PQL)
- X Estimated maximum possible concentration.

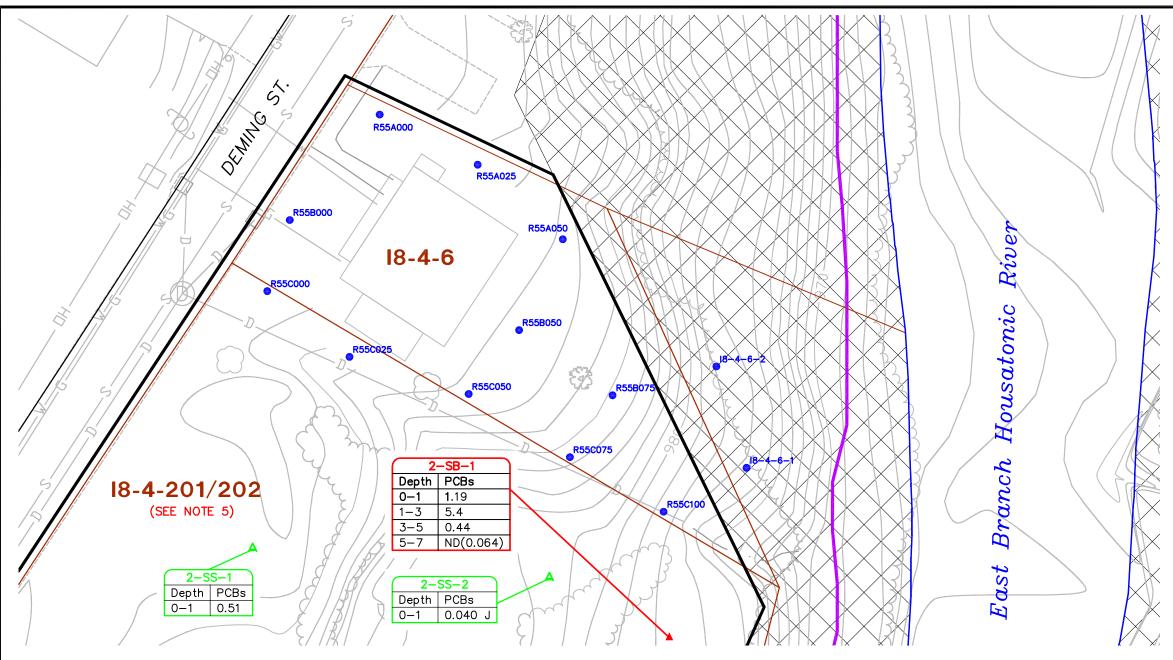
#### Incorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

Figures







### SUMMARY OF EXISTING PCB SOIL SAMPLE RESULTS

(RESULTS ARE PRESENT AS DRY WEIGHT PARTS PER MILLION, PPM)
(SAMPLE INCREMENTS IN FEET BELOW GROUND SURFACE)

	EP/	A SAMPLE RE	SULTS	
Sample ID	0-0.5	0.5-1	1-1.5	1.5-2
R55A000	0.4J	ND(0.6)	ND(0.5)	ND(0.6)
R55A025	0.12[ND(0.5)]	ND(0.5)	ND(0.6)	ND(0.7)
R55A050	ND(0.6)	ND(0.5)	ND(0.6)	ND(0.5)
R55B000	0.3J	ND(0.11)[ND(0.5)]	ND(0.5)	ND(0.5)
R55B050	ND(0.6)	ND(0.5)	ND(0.6)	ND(0.7)
R55B075	ND(0.7)	ND(0.6)	ND(0.11)[ND(0.5)]	0.2J
R55C000	ND(0.6)	0.2J	ND(0.5)	ND(0.5)
R55C025	ND(0.6)	ND(0.5)	ND(0.5)	ND(0.1)[ND(0.5)]
R55C050	ND(0.6)	ND(0.5)	ND(0.6)	ND(0.7)
R55C075	ND(0.13)[ND(0.6)]	ND(0.5)	ND(0.5)	0.3J
R55C100	ND(0.5)			

### GE SAMPLE RESULTS Sample ID 0-0.5 18-4-6-2 ND(0.1)[ND(0.1)]

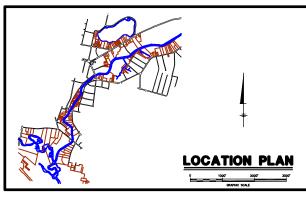
Notes to Tables:

A. Sample data obtained from EPA database titled 040403_usepa_hr_dbase1.mdb and GE database titled

B. J - Indicates estimated value less than the CLP-required quantitation limit.

C. --- - Indicates sample interval was not analyzed.

D. Duplicate results presented in brackets.



### **LEGEND**

10 YEAR FLOODPLAIN

APPROXIMATE PARCEL **BOUNDARY** 

FENCELINE

RESIDENTIAL PROPERTY PARCEL ID

PRE-PDI SOIL BORING LOCATION

PRE-DESIGN SURFACE SOIL SAMPLE LOCATION

PRE-DESIGN SOIL BORING

BOUNDARY OF FLOODPLAIN PROPERTIES DESIGNATED IN SOW (FOR GROUP 2).



18-4-6

R55C000

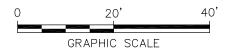
△^{2-SS-1}

2-SB-1

AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL ACTION

### NOTES TO FIGURE:

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC
- 4. PCB CONCENTRATIONS ARE REPORTED AS DRY WEIGHT PARTS
- 5. FORMER TAX PARCEL 18-4-5 HAS BEEN DIVIDED INTO TWO PARCELS, 18-4-201 AND 18-4-202, THE CONFIGURATION OF WHICH IS CURRENTLY UNAVAILABLE FROM THE CITY OF PITTSFIELD ASSESSOR'S OFFICE.



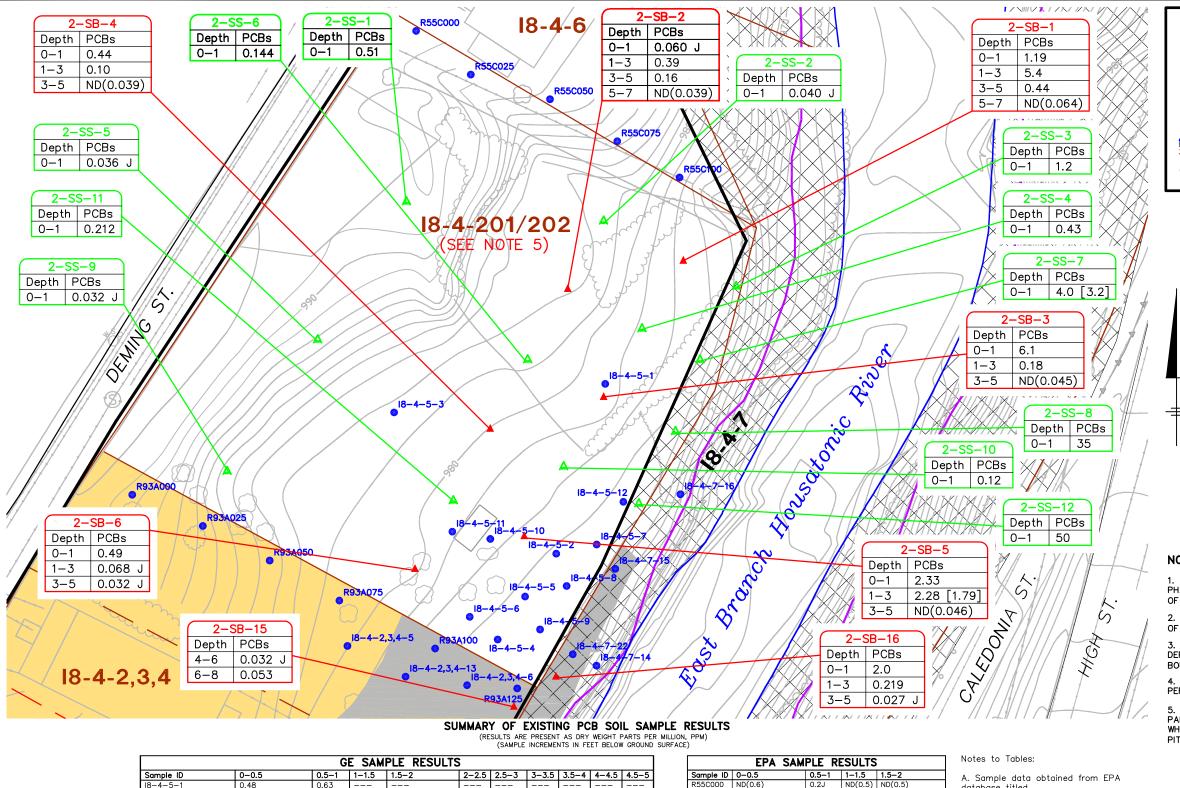
GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

SUMMARY OF SOIL SAMPLING LOCATIONS FOR PARCEL 18-4-6



**FIGURE** 

40122X02,40122X03.DWG
 ON=* OFF=*REF*
 PAGESET/PLT-BL
 1/3/04 SYR-86-NES LAF DMW
 N/40122003/40122G08.DWG



		G	E SAM	PLE RESULTS	3					
Sample ID	0-0.5	0.5-1	1-1.5	1.5-2	2-2.5	2.5-3	3-3.5	3.5-4	4-4.5	4.5-5
18-4-5-1	0.48	0.63								
18-4-5-2	0.13	0.61								
18-4-5-3	0.19	0.28								
18-4-5-4	11.4[12.7]	10.7	0.281	22.1	1.34	ND(0.1)				
18-4-5-5	0.343	0.266								
18-4-5-6	6.62[6.7]	0.909	0.292							
18-4-5-7	3.08	7.55	6.26	0.787	5.04	ND(0.1)				
18-4-5-8	11.3[17.7]	1.37	0.148	0.258						
18-4-5-9	1.59	5.28	0.773	0.512						
18-4-5-10	0.102[0.274]	ND(0.1)								
18-4-5-11	ND(0.1)	ND(0.1)								
18-4-5-12	0.498	2.19	2.43	0.413	0.629					
18-4-2,3,4-5	0.716	0.462	0.349	0.146						
18-4-2,3,4-6	4.77	2.26	1.06	46.1	10.4	4.64	8.2	1.3	0.129	0.594
18-4-2,3,4-13	0.171	ND(0.1)	ND(0.1)	ND(0.1)						
18-4-7-14	3.14	2.52	2.49	4.66	0.925	1.54				
18-4-7-15	9.5[9.2]	244	11.4	3.92	7.69	6.24				
18-4-7-16	2.75	7.57	5.08	1.47[1.81]	1.22	0.324				
18-4-7-22	7.87	13	65.6	42.2	700	6.8				

: 40122X02,40122X03.DWG : ON=* OFF=*REF* : PAGESET/PLT-BL

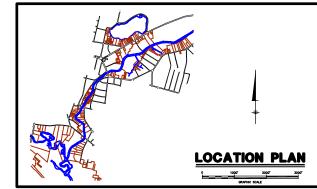
/40122003/40122G09.DWG

	EPA SAM	PLE RE	SULIS	
Sample ID	0-0.5	0.5-1	1-1.5	1.5-2
R55C000	ND(0.6)	0.2J	ND(0.5)	ND(0.5)
R55C025	ND(0.6)	ND(0.5)	ND(0.5)	ND(0.1)[ND(0.5)]
R55C050	ND(0.6)	ND(0.5)	ND(0.6)	ND(0.7)
R55C075	ND(0.13)[ND(0.6)]	ND(0.5)	ND(0.5)	0.3J
R55C100	ND(0.5)			
R93A000	ND(0.5)	ND(0.6)	ND(0.7)	ND(0.5)
R93A025	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
R93A050	ND(0.5)	ND(0.6)	ND(0.6)	ND(0.5)
R93A075	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.6)
R93A100	0.7J	0.5J	ND(0.7)	ND(0.6)
R93A125	0.097[0.2J]	ND(0.5)	ND(0.5)	ND(0.5)
R93A100	0.7J	0.5J	ND(0.7)	ND(0.6)

- A. Sample data obtained from EPA database titled 040403_usepa_hr_dbase1.mdb and GE database titled hr040903.mdb.
- B. J Indicates estimated value less than the CLP—required quantitation
- C. --- Indicates sample interval was not analyzed.
- D. Duplicate results presented in

limit.

E. Shading indicates soil was removed at this depth and clean backfill was placed at these locations.



### LEGEND

10 YEAR FLOODPLAIN

APPROXIMATE PARCEL BOUNDARY

BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES

FENCELINE

3-4-2,3,4 RESIDENTIAL PROPERTY PARCEL ID

18-4-7

NON-RESIDENTIAL PROPERTY PARCEL ID

● 18-4-5-▲ 2-SS-1

▲ 2-SB-1

PRE-PDI SOIL BORING LOCATION

PRE-DESIGN SURFACE SOIL SAMPLE LOCATION

PRE-DESIGN SOIL BORING LOCATION

BOUNDARY OF FLOODPLAIN PROPERTIES DESIGNATED IN SOW (FOR GROUP 2).

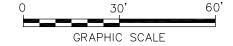
AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL ACTION

AREA OF PRIOR EXCAVATION (TO DEPTHS RANGING BETWEEN 1 AND 2.5 FEET)

PROPERTY PREVIOUSLY REMEDIATED; CLASS A RAO ACHIEVED

### NOTES TO FIGURE:

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.
- 4. PCB CONCENTRATIONS ARE REPORTED AS DRY WEIGHT PARTS PER MILLION, PPM.
- 5. FORMER TAX PARCEL 18-4-5 HAS BEEN DIVIDED INTO TWO PARCELS, 18-4-201 AND 18-4-202, THE CONFIGURATION OF WHICH IS CURRENTLY UNAVAILABLE FROM THE CITY OF PITTSFIELD ASSESSOR'S OFFICE.

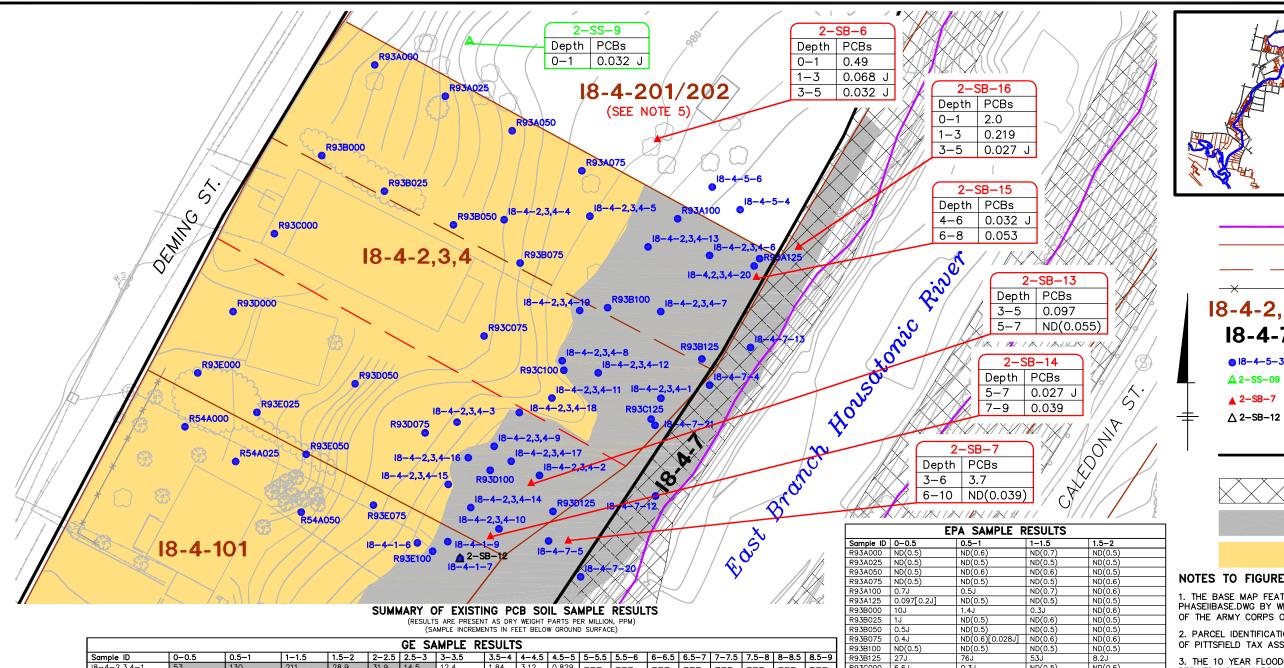


GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS
PHASE 2 FLOODPLAIN PROPERTIES
ADJACENT TO THE 1 1/2 MILE REACH

SUMMARY OF SOIL SAMPLING LOCATIONS FOR PARCELS 18-4-201/202



FIGURE

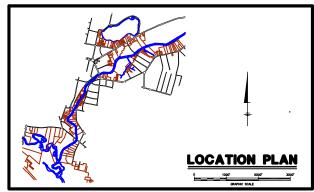


									-									
Sample ID	0-0.5	0.5-1	1-1.5	1.5-2	2-2.5	2.5-3	3-3.5	3.5-4	4-4.5	4.5-5	5-5.5	5.5-6	6-6.5	6.5-7	7-7.5	7.5-8	8-8.5	8.5-
18-4-2,3,4-	53	130	211	28.9	31.9	14.5	12.4	1.84	3.12	0.829								
18-4-2,3,4-2	2 76	18	13.1	1.44	1.37	3.45												
18-4-2,3,4-	3 0.64	0.25																
18-4-2,3,4-	4 0.128	ND(0.1)																
18-4-2,3,4-5	5 0.716	0.462	0.349	0.146														
18-4-2,3,4-6	6 4.77	2.26	1.06	46.1	10.4	4.64	8.2	1.3	0.129	0.594								
18-4-2,3,4-	7 21.6	17.4	6.9	9.8	10.3	4.48												
18-4-2,3,4-8	3.31	3.28	0.724	ND(0.1)														
18-4-2,3,4-9	31.2	75.5	30.4	3.33	3.54	4.87	0.18	3.85	0.563	1.23								
18-4-2,3,4-	1,430[1,440]	2,250[1,420]	798	195	24.8	78.7	4.31[24.9]	28.5	1.19	4.91								
18-4-2,3,4-	0.204[0.192]	0.327																
18-4-2,3,4-1	12 15.3	1.32	0.408	0.116	1.17	0.5												
18-4-2,3,4-1	0.171	ND(0.1)	ND(0.1)	ND(0.1)														
18-4-2,3,4-	1.96	0.708	ND(0.1)	ND(0.1)	0.112	ND(0.1)												T
18-4-2,3,4-	15 0.698[0.792]	0.193	ND(0.1)	ND(0.1)														T
18-4-2,3,4-	16 3.27	2.37	0.173															
18-4-2,3,4-	17 38	6.41	1.12															
18-4-2,3,4-	1.61	0.65	0.185															
18-4-2,3,4-	5.68	3.12	ND(0.1)															
18-4,2,3,4-2	0 15.1	111	120	32.2	2.2	34.8	20.9	4.87										
18-4-1-6	0.838	1.47	0.853	0.676														
18-4-1-7	220	214	91.3	32.3	43.8	29.4	15.8	11.6	2.4	7.75								
18-4-1-9	3.11	4.18	1.17	0.435	0.408	0.356												
18-4-5-4	11.4[12.7]	10.7	0.281	22.1	1.34	ND(0.1)												
18-4-5-6	6.62[6.7]	0.909	0.292													-		
18-4-7-4	65.9[65.2]	85.7	279	360	524	183	16.5	83.2	11.5	2.47	13.5	3.22						
18-4-7-5	14.1[12.1]	667	354	1,110	704	241	4.5	42.5	19.2	25.8	60.8	11.9						
18-4-7-12	2.67	14.6	188	205[167]	100	38.7												
18-4-7-13	4.29	14.3	41.5	102	73.1	24.5												
18-4-7-20	12.7	92.4	58.1	42.6	340	28.3	108	57.4	1.81	0.392	0.611	ND(0.1)				-		
18-4-7-21	42.9	188	2,410	212	8.17	5.34	1.99	6.58	3.64	1.3	105	25	61.1	22.9	7.64	0.16	0.349	0.26

8.2J ND(0.6) ND(0.5 R93C000 6.6J ND(0.6) 0.062[NI ND(0.5) R93C100 ND(0.6 R93C125 | ND(0.6) ND(0.5 ND(0.5 ND(0.5 ND(0.5) ND(0.6) ND(0.5) ND(0.5 ND(0.6) R93D075 0.4J ND(0.6) ND(0.5) ND(0.5 ND(0.034)[NI R93D100 ND(0.5 ND(0.5 ND(0.6) R93E025 ND(0.6) ND(0.5) ND(0.6 R93E050 0.029J[ND 5)] ND(0.6) ND(0.6) ND(0.5) ND(0.5) R93E100 ND(0.6

Notes to Tables:

- A. Sample data obtained from EPA database titled 040403_usepa_hr_dbase1.mdb and GE database titled hr040903 mdh
- B. J Indicates estimated value less than the CLP-required quantitation limit.
- C. --- Indicates sample interval was not analyzed.
- D. Duplicate results presented in brackets.
- E. Shading indicates soil was removed at this depth and clean backfill was placed at these locations.



#### LEGEND

10 YEAR FLOODPLAIN

APPROXIMATE PARCEL BOUNDARY

BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES

FENCELINE

4 RESIDENTIAL PROPERTY PARCEL ID

NON-RESIDENTIAL PROPERTY PARCEL ID

**● 18-4-5-3** △2-SS-09

PRE-PDI SOIL BORING LOCATION

PRE-DESIGN SURFACE SOIL SAMPLE LOCATION

PRE-DESIGN SOIL BORING LOCATION

PREVIOUSLY PROPOSED PCB AND APPENDIX IX+3 SOIL BORING LOCATION (ACCESS NOT OBTAINED) BOUNDARY OF FLOODPLAIN PROPERTIES DESIGNATED IN SOW (FOR GROUP 2).

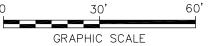
AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL ACTION

AREA OF PRIOR EXCAVATION (TO DEPTHS RANGING BETWEEN 1 AND 4 FEET)

PROPERTY PREVIOUSLY REMEDIATED; CLASS A RAO ACHIEVED

### **NOTES TO FIGURE:**

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.
- 4. PCB CONCENTRATIONS ARE REPORTED AS DRY WEIGHT PARTS PER MILLION, PPM.
- 5. FORMER TAX PARCEL 18-4-5 HAS BEEN DIVIDED INTO TWO PARCELS, 18-4-201 AND 18-4-202, THE CONFIGURATION OF WHICH IS CURRENTLY UNAVAILABLE FROM THE CITY OF PITTSFIELD ASSESSOR'S OFFICE.



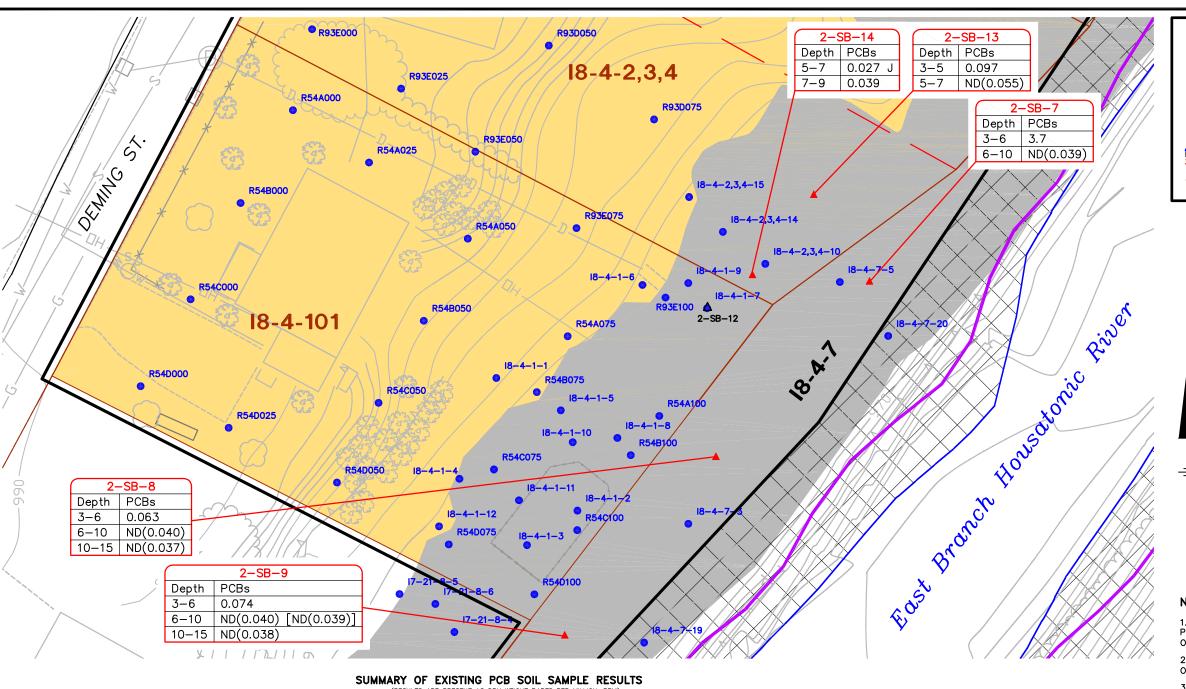
GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

SUMMARY OF SOIL SAMPLING LOCATIONS FOR PARCELS 18-4-2, -3, & -4



FIGURE 4

(: 40122X02. 10122X03.DWG :: ON=* OFF=*REF* P: PAGESET/PLT-BL 1/14/04 SYR-85-NES LAF DMW N/40122003/ 40122G10.DWG



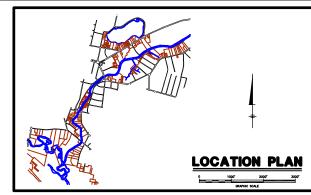
(RESULTS ARE PRESENT AS DRY WEIGHT PARTS PER MILLION, PPM (SAMPLE INCREMENTS IN FEET BELOW GROUND SURFACE)

		EPA SAM	IPLE RESUL	TS	
	Sample ID	0-0.5	0.5-1	1-1.5	1.5-2
	R54A000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54A025	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54A050	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54A075	ND(0.5)	1.7J	ND(0.5)	0.2J
	R54A100	ND(0.5)	ND(0.5)	ND(0.5)	17.3[34]
	R54B000	0.3J	ND(0.5)	ND(0.5)	ND(0.5)
	R54B050	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54B075	0.5J	0.4J	0.4J	ND(0.5)
	R54B100	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54C000	ND(0.5)	ND(0.5)	ND(0.035)[ND(0.5)]	ND(0.5)
	R54C050	ND(0.5)	0.3J	ND(0.5)	ND(0.5)
	R54C075	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54C100	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54D000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R54D025	0.2J	0.2J	0.2J	ND(0.5)
	R54D050	ND(0.5)	0.039[ND(0.5)]	ND(0.5)	ND(0.5)
	R54D075	1	0.5J	ND(0.5)	0.4J
	R54D100	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	R93D050	ND(0.6)	ND(0.5)	ND(0.5)	ND(0.6)
	R93D075	0.4J	ND(0.5)	ND(0.6)	ND(0.6)
X: 40122X02,	R93E000	ND(0.6)	ND(0.5)	ND(0.6)	ND(0.5)
40122X03.DWG L: ON=* OFF=*REF*	R93E025	ND(0.6)	ND(0.5)	ND(0.6)	ND(0.6)
P: PAGESET/PLT-BL	R93E050	0.029J[ND(0.5)]	ND(0.6)	ND(0.6)	ND(0.5)
1/14/04 SYR-85-NES	R93E075	0.6J	ND(0.6)	ND(0.5)	ND(0.6)
DJP DMW	R93E100	ND(0.6)	ND(0.5)	ND(0.5)	ND(0.5)
N/40122003/					

•			GE	SAMPLE F	RESULT	S						
Sample ID	0-0.5	0.5-1	1-1.5	1.5-2	2-2.5	2.5-3	3-3.5	3.5-4	4-4.5	4.5-5	5-5.5	5.5-6
18-4-1-1	0.59	0.31										
18-4-1-2	170	160	98.7	11.2	3.54	74.6	1.79	1.1	3.75	0.708		
18-4-1-3	41	48										
18-4-1-4	3.41	1.09	7.68	0.129[0.13]	0.698							
18-4-1-5	5.68	2.22	1.27	0.289	0.251							
18-4-1-6	0.838	1.47	0.853	0.676								
18-4-1-7	220	214	91.3	32.3	43.8	29.4	15.8	11.6	2.4	7.75		
18-4-1-8	145	204	24.3	3.34	39.3	11.8	4.57	0.677	0.224			
18-4-1-9	3.11	4.18	1.17	0.435	0.408	0.356						
18-4-1-10	3.37[3.43]	0.878	1.03	0.148	ND(0.1)	0.223						
18-4-1-11	4.04	2.85	0.638	0.99[0.576]	0.889	1.04						
18-4-1-12	1.29	0.947	0.186									
17-21-8-4	295	55	18.2	3.04	17.8	1.98						
17-21-8-5	0.807	0.385	0.295	ND(0.1)								
17-21-8-6	3.98	3.08	0.519	0.861								
18-4-2,3,4-10	1,430[1,440]	2,250[1,420]	798	195	24.8	78.7	4.31[24.9]	28.5	1.19	4.91		
18-4-2,3,4-14	1.96	0.708	ND(0.1)	ND(0.1)	0.112	ND(0.1)						
18-4-2,3,4-15	0.698[0.792]	0.193	ND(0.1)	ND(0.1)								
18-4-7-3	100	110	258	118	316	403	117	40.6	43.1	56.1	6.79	60
18-4-7-5	14.1[12.1]	667	354	1,110	704	241	4.5	42.5	19.2	25.8	60.8	11.9
18-4-7-19	105[84]	63.8	33.2	91.9	16.5	69	13.2	1.32	19.8	0.207	0.354	ND(0.1)
18-4-7-20	12.7	92.4	58.1	42.6	340	28.3	108	57.4	1.81	0.392	0.611	ND(0.1)

otes to Tables:

- Sample data obtained from EPA atabase titled 040403_usepa_hr_ base1.mdb and GE database titled r040903.mdb.
- J Indicates estimated value ess than the CLP—required uantitation limit.
- --- Indicates sample interva as not analyzed.
- Duplicate results presented in rackets.
- Shading indicates soil was emoved at this depth and clean ackfill was placed at these cations.



# FENCELINE PRE-PDI SOIL BORING LOCATION **● I8-4-1-5** ▲ 2-SB-7 △ 2-SB-12

**LEGEND** 

10 YEAR FLOODPLAIN

APPROXIMATE PARCEL BOUNDARY

BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES

4 RESIDENTIAL PROPERTY PARCEL ID

NON-RESIDENTIAL PROPERTY PARCEL ID

PRE-DESIGN SOIL BORING LOCATION

PREVIOUSLY PROPOSED PCB AND APPENDIX IX+3 SOIL BORING LOCATION (ACCESS NOT OBTAINED)

BOUNDARY OF FLOODPLAIN PROPERTIES DESIGNATED IN SOW (FOR GROUP 2).

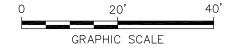
AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL ACTION

AREA OF PRIOR EXCAVATION (TO DEPTHS RANGING BETWEEN 0.5 AND 4 FEET)

PROPERTY PREVIOUSLY REMEDIATED; CLASS A RAO ACHIEVED

### NOTES TO FIGURE:

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC
- 4. PCB CONCENTRATIONS ARE REPORTED AS DRY WEIGHT PARTS PER MILLION, PPM.

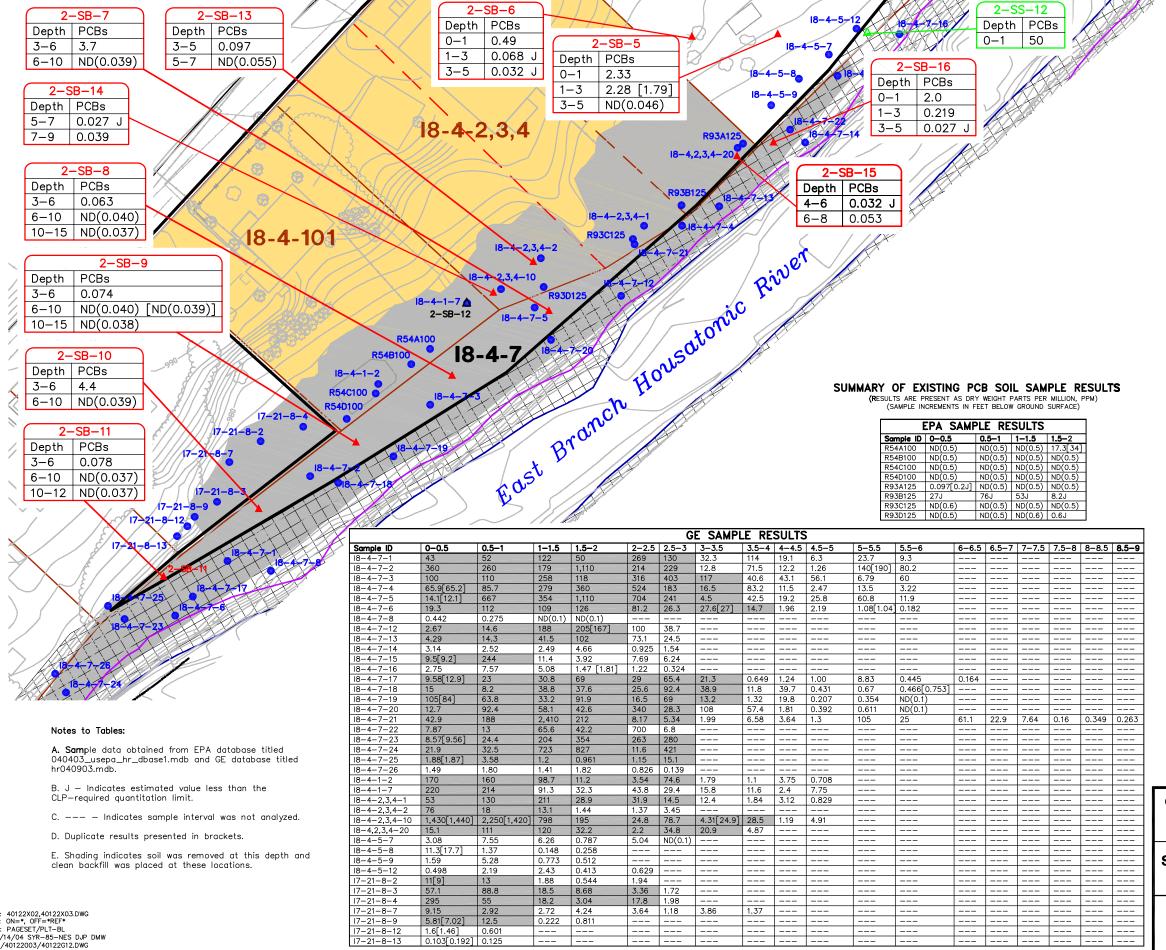


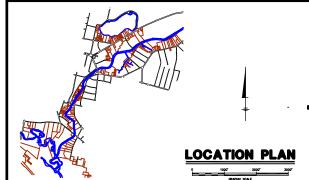
GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS
PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

SUMMARY OF SOIL SAMPLING LOCATIONS **FOR PARCEL 18-4-101** 



**FIGURE** 





#### LEGEND

10 YEAR FLOODPLAIN

APPROXIMATE PARCEL BOUNDARY

BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES

FENCELINE

RESIDENTIAL PROPERTY PARCEL ID

ROPERTY PARCEL

NON-RESIDENTIAL PROPERTY PARCEL ID

S DOLLAR DODING

PRE-PDI SOIL BORING LOCATION

PRE-DESIGN SURFACE SOIL

SAMPLE LOCATION

▲ 2-SB-5 PRE-DESIGN SOIL BORING LOCATION

△ 2-SB-12

18-4-101

18-4-7

**● 18-4-5-7** 

△ 2-SS-12

PREVIOUSLY PROPOSED PCB AND APPENDIX IX+3 SOIL BORING LOCATION (ACCESS NOT OBTAINED)

BOUNDARY OF FLOODPLAIN PROPERTIES DESIGNATED IN SOW (FOR GROUP 2).

AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL ACTION

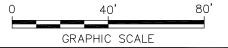
AREA OF PRIOR EXCAVATION
(TO DEPTHS RANGING BETWEEN 1

(TO DEPTHS RANGING BETWEEN AND 4 FEET)

PROPERTY PREVIOUSLY REMEDIATED; CLASS A RAO ACHIEVED

### NOTES TO FIGURE:

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC
- 4. PCB CONCENTRATIONS ARE REPORTED AS DRY WEIGHT PARTS PER MILLION, PPM.



GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS
PHASE 2 FLOODPLAIN PROPERTIES
ADJACENT TO THE 1 1/2 MILE REACH

SUMMARY OF SOIL SAMPLING LOCATIONS FOR PARCEL 18-4-7



FIGURE 6

# Appendices



# Appendic A

**Soil Boring Logs** 



Date Start/Finish: 5/22/03 Drilling Company: BBL Driller's Name: TOR Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530547.6791 Easting: 128420.0085 Casing Elevation: NA

Bonehiole Dieptih: 10° below grade

Surface Ellevation: NA

Descriptions By: JAB

Bioring ID: 2-SB-1

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

						*********		
DEPTH T	ELEVATION	Sample Run Number	Samplé/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
		••••••						
-43	45	 1	0-1		0.0		Brown Sh.T, Grass and Roots.	
			1 0-1				Olive-gray CLAYEY-Sit.T, some fine Sand, fine Gravel	
	-	2:	1-3	2.2	0.0	X X X X X X X X X X X X X X X X X X X	Crange and black SLAG.	
						х ² х х х х		
		3	3-5		0.0	× × ×	Orange-gray SLAG, fine Gravel, wet.	- with Benton te.
5	- 5 -		ļ 			ж ж 227272	Brown WOCCi debris, brown Sift, wet.	
	1	4.	5-7	2.6	0.0		Black Sil.T, wet.  Brown fine to medium SAND, with brown Sill, well odor.	
		5	7-9		0.0			
					3.0		Brown fine SAND, few fine Gravel, wet.  Crange fine to medium SAND, wet.	
	-	Ei	9-10	2.0	inla		White-brown fine SAND, challty looking Limestone.	
<u>-</u> 1:43 <b></b> -	ā: <b>(</b> 5'							J:41101
15-	-1 15							
		SLAN	D, BC	DUCK & s	<b>8</b> : LE	E, IN		

Project: 401,22,001 Data File:2-SB-1dat Templatetv:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf
Date: 6/3/03

Date Start/Finish: 5/22/03 Drilling Company: BBL Driller's Name: TOR Drilling Method: Direct Push

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530538.8108 Easting: 128383.7571 Casing Elevation: NA

Borehole Depth: 10' below grade

Surface Elevation: NA

Descriptions By: JAB

Boring ID: 2-SB-2

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

***********								
ш а. О	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
-43			0-1				Brown SILT.	
	-	1	V+:		0.0	<del>7</del>	Brown-black SLAG.	
		2	1-3	2.3	0.0	××	Brown Sit.T.	-
							<i>y</i>	
		3	3-5		0.0		Black SILT.   White broken GRAVEL.	with Bentanite.
· 5 -	. 5						Brown fine SAND: with some Siff.	
		4	5-7	3.2	31. <b>0</b>		Olive-gray SILTY-CLAY, with some fine Gravel:	
		5	7-9		0.0		Moist at 8' bgs.	
		6	9-1:0	2.0	NA	E3E3E3	While GRAVEL.	
	-9						Olive-gray Sit,TY-CLAY, with some fine Gravel.	]IIIIII
- 15- 2								
 B	III.	ELAN	D, BC		& LE		Rennarks: bgs = below ground surface; NA = Not Applie Analyses: 0-1': PCBs; 1-3': PCBs; 3-5': PCBs 5-7': PCBs (on hold); 7-9': PCBs (on hold).	able/Available.

Date Start/Finish: 5/22/03 Drilling Company: BBL Oriller's Name: TOR Drilling Method: Direct Push

Auger Size: NA

Riig Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530504.9722 Easting: 128395.0126 Casing Elevation: NA

Borehole Depth: 10' below grade

Surface Elevation: NA

Descriptions By: JAB

Boring ID:2-SB-3

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

	.,,,						
DEPTH ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
- <del>(3</del> ₁ 5)	1	0-1		0.1		Brown SILT.  SLAG, black Ash, some Silt, Wood, Chancoal.	
	2	1-31	2.6	0.1	× × × × × × × × × × × × × × × × × × ×	Brown File SAIND.  ASH, brown Silt.	
5 -5	3	3-5		0.1	V V V V V V V V V V V V V V V V V V V		Borehole backfill with Bentonite
5 -9	4.	5-7	2.5	0.0		Brown SILT, few fine Gravet, Porcelain  Brown fine SAND, with brown Sit.	
	5	7-9	] 	0.0		Brown fine SAND, brown Clayey-Sift, decayed Wood.	
	6	9-10	2.0				
-1£48k=-3£43k-							
a reac							
15-15			4.4.4.4.6.	4			
	ASLAN					Remarks; bgs = below ground surface; NA = Not Applic Anallysies: 0-1": PCBs; 1-3": PCBs; 3-5": PCBs 5-7": PCBs (on hold): 7-9": PCBs (on hold).	able/Available.

Project: 401.22.001 Data File:2-SB-3.dat

engineers & scientists

Template:V:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf
Date: 6/3/03

Date Start/Finish: 5/23/03 Drilling Company: BBL Driller's Name: SLL Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 4' Maicrocore

Northing: 530494.9663 Easting: 128859.4651 Casing Elevation: NA

Borehole Depth: 10" below grade

Surface Elevation: NA.

Descriptions By: JAB

Boring ID: 2-SB-4

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

l	***********						
DEPTH ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
-	1 2	0-1	3.4	0.0		Coanse brown SILT, Grass, Roots.  Dark brown SILT, fine Gravel.  Dark brown SILT, with Ash, oxidized.  Dark brown SILT, with Ash and Cobble.	
-5 -5	3	3-5		0.0		SH.T, fine Gravel, fine to coarse Sand, very damp.  Otive-brown SHLT, trace Clay, medium to coarse Sand, fine Gravel	Borehole tackfilled with Benton le
m5 -57	4	5-7	3.2	0.0		Fine Sand, fine to medium Gravell, weathered till.	
1-0-1-0-	5	7-9 9-10	0.9	MA.			
15-15 -					ļ	Remarks; bgs = below ground surface; NA = Not Applic Analyses: 0-1': PCBs; 1-3': PCBs; 3-5': PCBs	able/Available.
BLA en	SLAN	D, BC	DUCK & s	84 LE	E, INC	5-7': PCBs (on hold): 7-9': PCBs (on hold).	

Date Start/Finish: 5/23/03 Drilling Company: BBL Driller's Name: SLL Dirilling Method: Direct Push

Auger Size: NA

Riig Type: Tractor-mounted Power Probe

Sample Wethod: 4' Macrocore

Northing: 530461.3246 Easting: 128370.1266 Casing Elevation: MA

Bionehiole Depiths 9' below grade

Surface Elevation: NA

Descriptions By: JAB

Boring ID: 2-SB-5

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

.00 { (c), (u); (C)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphilic Description	Boring Construction
				10 to				
-43>		1	0-1		0.0		Brown fine SAND and SiLT, little medium Sand, trace coarse Sand and Roots, moist.	
		2	1-3	2.2	0.0		Dark brown fine SAND, some medium to coarse Sand, Ash, Coal, most.	
	-	3	3-45		0.0			Borehole backfill with Bentonite.
- 5	-5-	.4	57	3.8	0.0		Dark brown fine SAND and SILT, moist.	
		5.	7-9	1,0	0.0	100 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Olive brown SILT, little coanse to fine Send, trace fine Gravel, moist.	
1.0	10 -							
- 15-	15							
	BLAS			DUCK		 	Remarks; bgs = bellow ground surface; NA = Not Applic Analyses: 0-1': PCBs; 1-3': PCBs; 3-5': PCBs 5-7': PCBs (on hold); 7-9': PCBs (on hold). Duplicate sample ID: 2-SB-Dup-2 (PCBs, 1-3 MS/MSD collected (PCBs, 3-5').	s;

Date Start/Finish: 5/23/03 Drilling Company: BBL. Driller's Name: SLL. Drilling Method: Direct Push

Auger Size: NA

Rtigi Tyjpe: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530451.0504 Easting: 128335.8781 Casing Elevation: NA

Borehole Depth: 9" below grade

Surface Elevation: NA

Descriptions By: JAB

Boring ID: 2-SB-6

Client: General Electric Company

Location: Housatonic River 4 1/2 Mile

Flood Plain Properties

k		*******	.,					
ш ф ш	ELEVATION	Sample Run Number	Sample/int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
-								
@ - - -		1	0-1	2.8	0.0	X X X X X X	Brown fine SANO and SILT, little medium Sand, trace coarse Sand, fine Gravel, Roots.  Gray-brown SAND, Ash, Cinders and Glass, dry.	
-		3	3-5	2.72	0.0		Brown fine SAND and SILT, trace medium to coarse Sand and fine Gravet, moist.  Brown fine SAND, little coarse to medium Sand, fine Gravet and Silt, moist.	Borehole backfilled with Bentonite.
5	- 5 -	4	57	3.2	0.0		Ofive-brown SRT, little Sand and Gravel, moist.	
		5	7.·g	1.0	0.0			
10 -	10 -							
-								
15- :				<b>,</b>				
	LAS	SLAN	D, BC		8: LE	E, IN		

Project: 401.22.001 Data File:2-S8-6.dat Template:V:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf
Date: 6/4/03

Date Start/Finish: 5/23/03 Drilling Company: BBL Driller's Name: SLL

Drilling Method: Direct Push

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe-

Sample Method: 4" Macrocore

Northing: 530325.2004 Easting: 128307.8999 Casing Elevation: NA

Boreholle Depth: 10' below grade

Surface Elevation: NA.

Descriptions By: RJP

Boring ID: 2-SB-7

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

E E	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction	
{ <b>}</b>					150 150 150 150 150 150 150 150 150 150		No samples collected.		
		1	0-3	3.1	NA.				
		2	3-4		0.0		Brown fine SANO.  Dark brown SiLT, with fine Sand and Roots, odor.	Borehole backfille with Elentonite	
5	-5-	3	4.45			0.0	### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1 ### 1	Fine SAND and SILT, piece of metal, oxidized.  Fine SILT, Rock (weathered stone), moist.	Will is series life.
		.4	6-5	2.2	0.0		Same as above, with oxidized wealthered stone.		
10.1	-	5	8-10	1.0	0.0				
<del>-1.</del> 01							Refusal at 10' bgs.		
- 1.5-1	15 -								
				DUCK			Remairics: bgs = below ground surface; NA = Not Applic Analyses: 3-6': PCBs; 6-10': PCBs.		

Project: 401.22.001 Data File:2-SB-7.dat Template:V:\GE_Housatonic_Mille_and_Half\Notes and Data\Logs\40122(v.2).ldf

Date: 6/4/03

engineers & scientists

Date Start/Finish: 5/27/03 Drilling Company: 88L Drifter's Name: JJB Drilling Method: Direct Push

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Morthing: 530288.6810 Easting: 128275.9015 Casing Elevation: NA

Boreholle Depth: 15' below grade

Surface Elevation: NA

Descriptions By: SLL

Boring ID: 2-SB-8

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
-					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Pre-probe to 3' bgs.	
	1	3-4	0.7	0.0		Brown SilLT, some fine Sand and fine Gravel.	Borehole backfille
5 -5-	2	4+3.		0.0		Brown Sill, T., little fine Grawet, moist.	with Bentonite.
-	3	6-B	3.0	0.0			
-	4	B-10		0.0		Dark brown SILT, trace fine Gravel, wet.  Brown SILT, little fine Gravel, moist.	
1.0-1.0	5	10-12	3.4	0.0		Brown Sil.T, trace fine Gravel, tight.  Yellow-tan Sil.T, some fine Sand and Gravel, moist.	
-	6	12-14	3.0	0.0		Yellow-brown fine SAND, some Sift, trace fine Gravet, wet.  Change-yellow fine SAND, some Sift, trace fine Gravet, wet.	
	7 10	14-15		0.0			

BILASLAND, BOUCK & LEE, INC. engineers & scientists Remarks; bgs = below ground surface; NA = Not Applicable/Available. Analyses: 3-6'; PCBs; 6-10'; PCBs; 10-15'; PCBs.

Project: 401.22.001 Data File:2-SB-8.dat Template:V:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf

Date: 6/3/03

Date Start/Finish: 5/27/03 Drilling Company: BBL Driller's Name: JJB

Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 4" Macrocore

Northing: 530251.4647 Easting: 128244.4073 Casing Elevation: NA

Borehole Depth: 15' below grade

Surface Elevation: NA

Descriptions By: SLL

Boring ID: 2-SB-9

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
<b>-</b>	-							
							Pre-probe to 3' bgs.	
		1	3-4	0.7	0.0		Dark brown SILT, little fine Sand, trace Gravet, moist	Borehole backfilk
-5	5	2	4-6		0.0	Part of the part o	Brown SILT, little fine to coarse Sand, trace Gravet, moist.	with Bentorite.
	-	3	6-43	2.5	0.0			
10-1		4	.5I10		0.0		Same as above, trace Cobble	
		.5	10-12	2.6	0.0			
	-	6	12-14	2.6	0.0		Yellow-tan SILT, some fine Sand and Gravel, wet.	
-3-51-	5-	7	14-15		0.0			
***************************************							Remarks: bgs = bellow ground surface; NA = Not Applic Analyses: 3-6': PCBs; 6-10': PCBs; 10-15': P Duplicate sample ID: 2-SB-Dup-4 (PCBs, 6-1 MS/MISD collected (PCBs, 3-6').	PCBs.

Project: 401.22.001 Data File:2-SB-9.dat

8LASLAND, BOUCK & LEE, INC. engineers & scientists

Template:\/:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf Date: 6/3/03

Date Start/Finish: 5/27/03 Drilling Company: BBL Driller's Name: JJB Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530214.1967 Easting: 128212.4291 Casing Elevation: NA

Biorehole Depth: 10° below grade Surface Ellevation: NA

Buntace Ellevalucing NA

Descriptions By: SLL

Boring ID: 2-SB-10

Cilient: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

HLdig	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
	-							
<del>()</del>	<b>45</b> b						Pre-probe to 3' bgs.	
-		1	3-4	0.5	0.0		Dark brown SILT. httle fine Sand, trace Gravel, moist.	Bonehole backfilled with Bentonite,
15.	- 5	2	4-6		0.0		Gray SILT, trace fine Sand and fine Gravel, most.  Dark brown SILT trace fine Sand, and fine Gravel, most.	
		3	6-8	2.0	0.0	Send to depart of the control of the		
_		4	18-11C)	2.0	0.0	THE COMMENT OF THE PARTY OF THE	Same as above, firace Cobble.  Gray-brown Sill,T, trace fine Gravell, moist.  Yellow-brown fine SAND and Sill,T, trace fine Gravel, moist.	
<u></u>	10						Refusal at 10' bgs.	
<del></del> 15	15 ~							
				DUCK & s				lable/Available.

Project: 401.22.001 Data Fille:2-SB-10.dat Templiate:V:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v:2).tdf

Date: 6/3/03

Date Start/Finish: 5/27/03 Drilling Company: BBL Driller's Name: JJB Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530176.6651 Easting: 128181.4672 Casing Elevation: NA

Boreholle Depth: 12' below grade

Surface Elevation: NA

Descriptions By: SLL

Boring ID:2-SB-11

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

ОЕРТН	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
6}								
	-						Pre-probe to 3' bgs.	
		1	3-4	0.5	0.1		Light brown fine SAND, trace Silf, fine Gravef, moist.	Borehole backfilled with Bentonite.
5	- 5	2	4-6		0.0		Brown fine SAND, trace coarse Grawel.	
-		3	6-8	2.0	0.0	ADD C GREEN C G GREEN C G GREEN C G GREEN C GREEN C G GREEN C G G G G G G G G G G G G G G G G G G	Dark gray Sit. 1, trace fine to medium Gravel.	
-		ž).	8-110		0.0	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Yellow fine SAND and SILT, trace fine Gravel, moist.  Gray-brown SILT, trace fine Gravel, coarse Gravel, moist.	
1.0-	10	5	10-12	3.8	C.O	or man of the common of the co		
							Refusal at 12' bgs.	. STEECA.
- 15-	15 -							
	BLA	SLAN	D, BC	DUCK		E, IN	Remarks; bgs = below ground surface; NA = Not Applic Analyses: 3-6': PCBs; 6-10': PCBs; 10-12': Pt  C.	able/Available.

Project: 401.22.001 Data File:2-SB-11.dat Template:V:\GE_Housatonic_Mile_and_HaffNotes and Data\Logs\40122(v.2).lldf

Date: 6/3/03

engineers & scientists

Date Start/Filnish: 5/27/03 Drilling Company: BBL Driller's Name: JJB Drilling Method: Direct Push

Auger Size: NA

Riig Type: Tractor-mounted Power Probe Sample Method: 4' Macrocore

Northling: 530343.2702 Easting: 128296.3043 Casing Elevation: NA

Borehole Depth: 12" below grade

Surface Elevation: NA

Descriptions By: SLL

Boring ID: 2-S8-13

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

III (1)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologio Column	Stratigraphiic Description	Bering Construction
	-							
	(Sh						Pre-probe to 3' bgs.	
		1	3445	:	0.0	PRESENTABLE OF THE STATE OF THE	Gray SAND and SILT, Ash, Cinders, tan Clayey-Sill, moist.  Dark gray SILT, trace fine to medium SAND, moist.	Borehole backfide with Bentonite.
-5	5	2	5-7	2.9	0.0	THE PARTY OF THE P	Olive brown SILT, fine Sand, little coarse to medium Sand, fine Gravel, moist.	
		3	7-450		0.0			
- 10-10	0	4	9-11	4.0	0.0			
<b></b>		5	11-12	1.0	INJ,A,	* 0	Refusal at 12' bgs.	
	-1						rverussan etc raz tryes.	
- 15-15	5							
				nck Z			Reimarks: bgis = below ground surface; NA = Not Applica Analyses: 3-5': PCBs; 5-7': PCBs; 7-9': PCBs 11-12': PCBs (on hold).	able/Awailable.

Project: 401.22.001 Data File:2-SB-13.dat

engineers & scientists

Template:V:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf Date: 6/3/03

Date Start/Finish: 5/23/03 Drilling Company: BBL Driller's Name: SLL

Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 4" Macrocore

Northing: 530326.5684 Easting: 128283.5220 Casing Elevation: NA

Borehole Depth: 14' below grade

Surface Elevation: NA

Descriptions By: JAB

Boring ID: 2-SB-14

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH ELEVATION	2000	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0								
							Fre-probe to 4" tgs.	Borehole backfiller with Benlonde.
-5 -5	1	1	5-7	3.7	0.9		Gray SILT, with trace fine Sand and fine Gravel, very compacted, moist.	
		2	7-9		NJA.	1 000 0 000 0 000 0 000 0 000 0 000 0 000 0	Same as above, with traces of weathered stone.	
- 10-10		3	9-11	3.0	N/s.			
	,	4 	11-13	2.0	NA	1 man, 4 man, 1	Refusal at 14' bgs.	
**************************************		5	13-14		INJA,	0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Orange-brown fine SAND, some coarse Sand, with fine Gravel	
- 15- 15				-				
							Remarks: bgs = below ground surface; NA = Not Applic Analyses: 5-7': PCBs, VOCs, SVOCs, PCDD 9-11': PCBs (on hold); 11-13': PCBs (on hold MS/MSD collected (VOCs, SVOCs, Inorganic	able/Available. /PCDF, Inorganics; 7-9': PCBs; ); 13-14': PCBs (on hold).

Project: 401.22.001 Data File:2-SB-14.dat

BLASLAND, BOUCK & LEE, INC. engineers & scientists

> Template:VAGE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf Date: 6/4/03

Date Start/Finish: 5/23/03 Drilling Company: BBL Driller's Name: St.t.

Drilling Method: Direct Push

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530407.8387 Easting: 128366.8883 Casing Elevation: NA

Boreholle Depth: 11' below grade

Surface Elevation: NA

Descriptions By: JAB

Boring ID:2-SB-15

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH	Sample Run Number	Sample/int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
( <del>)</del> ( <del>)</del>						Pre-probe to 4' bgs.	Borehole backfille
5 5	1	4-6		0.0		Brown fine SAND and SILT, trace coarse to medium Sand, coarse Gravel, moist.	with Bentonite.
	- 2	E-43	3 4	0.0		Sirceen fine SAND and SILT.	
1010	3	8-10	31.0	0.0		Brown SILT, title fine to medium Sand, Gravel, trace Cobble.	
	4	10-11		0.0	HER IS AND THE STREET OF THE S	Refusal at 11' bgs.	
15-15							
****					(1111111111111111111111111111111111111	Remarks: bgs = below ground surface; NA = Not Applic Analyses: 4-6': PCBs, VOCs, SVOCs, PCDD 6-8': PCBs; 8-10': PCBs (on hold); 10-11': PC Duplicate sample ID: 2-SB-Dup-3 (PCBs, 4-6'	/PCDF, Inorganics; Bs (on hold).

Project: 401.22.001 Data File:2-SB-15.dat

BLASLAND, BOUCK & LEE, INC. engineers & scientists

> Template:V:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf Date: 6/4/03

Date Start/Finish: 5/23/03 Drilling Company: BBL Driller's Name: SLL Drilling Method: Direct Push

Auger Size: NA Rig Type: Tractor-mounted Power Probe

Sample Method: 4' Macrocore

Northing: 530417.2827 Easting: 128380.0795 Casing Elevation: NA

Borehole Depth: 9' below grade

Surface Elevation: NA

Descriptions By: JAB

Boring ID:2-SB-16

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

H L L L L L L L L L L L L L L L L L L L	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction		
.,,		1	0-1	,	0.0		Brown fine SAND and SILT, little ocarse to medium Sand, trace Roots.			
		2	1-3	3.1	3.1	3.1	0.0		Brown fine SAND and SILT, little Gravel, moist.	
							Brown fine SILT and fine SANID, fine Grevell, moist	Borehole backfill with Bertonite.		
5	<i>t</i> -	3	3-5		0.0		Weathered STONE.  Brown Fine SAND and SILT.			
5	- 5	4	5-7	.2.1	NA					
		5	7-9	1.0	IN],¢,					
10-1	10									
15-1		į								
/4;			. ""		. "'''	haaaaaaaadd ger	Remainics; bgs = below ground surface; NA = Not Appli Analyses: 0-1': PCBs; 1-3': PCBs; 3-5': PCB 5-7': PCBs (on hold); 7-9': PCBs (on hold).	cable/Available.		

engineers & scientists

Date Start/Finish: 5/15/03 Drilling Company: BBt. Drilling Mame: BRH Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocone

Northing: 530566.2266 Easting: 128333.2028 Casing Elevation: NA

Borehole Depths 1' below grade

Surface Elevation: NA.

Descriptions By: RWB

Boring ID:2-SS-1

Offerit: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

					***********			
т Б. Ш.	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
			0-1	1.0	0.9		Brown fine SAIND and SiLT, Irace medium Sand and Roots.	Borehole backfille with Bentonrie.
							Brown medium to fine SAND, trace fine Gravet.	J. J
5	-5 -							
1.0 - 1.	0							
1.5 - 1					 	     	Remarks: bgs = below ground surface; NA = Not Applic	
<u>B</u>	LASL	AND	) ) ), BC		84 LE	E, IN	Analyses: 0-1": POBs.	antory tenento.

Project: 401.22.001 Data File:2-SS-1.dat

engineers & scientists

Template:V:\GE_Housatonic_Mile_and_Half\Notes and Data\t.ogs\40122(v.2).ldf Date: 6/4/03

Date Start/Finish: 5/15/03 Drilling Company: BBL Driller's Name: BRH Drilling Method: Direct Push

Auger Size: NA

Riig Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocore

Northing: 530560.1272 Easting: 128395.0187 Casing Elevation: NA

Borehole Depth: 1' below grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-2

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

***********			T	T	T	7			***************************************
DEPTH H	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construc	
-									
	6}					V V V	Dark brown fine SAND and Sit.T, uace Roots and Organics		Ekone boke backtiffed
		11	0-1	1.0	0.5	,,,,,,	Light grey ASH and black SLAG.		with Bentonite.
	-								
- 5	- 5								
				:					
	-								
3.0	,,								
- 10-	10 -		}						
	-								
	1								
- 15-	15 -								
	BLAS	SLAN	D, BC	DUCK & s	& L.E	E, IN	Rennanks; bgs = below ground surface; NA = Not Applic Analyses: 0-1': PCBs.  C.		

Project: 401.22.001 Data File:2-SS-2.dat Template:\text{\chi}\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf
Date: 6/4/03

Date Start/Finish: 5/15/03 Drilling Company: BBL Driller's Name: BRH Drilling Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 2" Macrocore

Northing: 530539.6324 Easting: 128436.5729 Casing Elevation: NA

Borehole Depth: 1' below grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-3

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

			PID Headspace (ppm)	Geologic Column		
J						
,	0-1	1.0	1.0		Dark brown fine SAND and SILT, trace Roots.  Brown fine to readjum SAND trace fine Gravet	Borehole backfille with Bentonite.
_	!					
	1	1 0-1	1 0-1 1.0	1 0-1 1.0 1.0	1 0-1 1.0 1.0	Dark brown fine SAND and SILT. trace Roots  Brown fine to medium SAND, trace fine Gravet.

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Date Start/Finish: 5/15/03 Drilling Company: BBL Driller's Name: BRH

Drilling Method: Direct Push

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocore

Northing: 530526.3924 Easting: 128407.0526 Casing Elevation: NA

Boreholle Depth: 1" below grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-4

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

	·······		 		·········	7		······
DEPTH H	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Berling Construction
	-							
{}	()	1	0-1	1.0	D.15		Brown line to medium SAND and SILT, trace fine and medium Gravet, Glass and Stag.	Borehole backfilled with Bentonite
					:			5-10-10-10-10-10-10-10-10-10-10-10-10-10-
						:		
- 5	5							
J								
	_							
- 10	10 -							
	-							
	-							
- 1.5-	15 -							
*********								
						 	Remarks; bgs = below ground surface; NA = Not Applica Analyses: 0-1': PCBs.	able/Available.

Project: 401.22.001 Data File:2-SS-2.dat

BLASLAND, BOUCK & LEE, INC. engineers & scientists

> $Template: V: AGE_Housatonic_Mile_and_Half \label{eq:housatonic} Mile_and_Half \label{eq:housatonic}. \\$ Date: 6/4/03

Date Start/Finish: 5/15/03 Driffing Company: BBL Driffer's Name: BRH Driffing Method: Direct Push

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 2' Maicrocore

Northing: 530522.9271 Easting: 128305.3923 Casing Elevation: NA

Boreholle Deptin: 1º bellow grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-5

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

Bonehole backfitle with Bentonite:

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocons

Northing: 530516.6584 Easting: 128371.2191 Casing Elevation: NA

Biorehiole Depths 1' below grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID:2-SS-6

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH ELEVATION Sample Run Number		Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction		
~4 <u>G</u> b							Brown fine SAND and SILT, trace medium Sand, fine Gravet, and Roots.			
		1	0-1	1.0	0.7		EQUATION & SAIND AND SILLY, SIGNS PROMITE CARRY, THE CHARLET, SINCE TOOLS.	Borehole backfille with Bentonite.		
5	5 -									
10-	10 -									
	-									
		,	!			,				
15-	15 -									
			************	***********	**********					

Project: 401.22.001 Data File:2-SS-6.dat Template:V:\GE_Housatonic_Mile_aind_Half\Notes and Data\Logs\40122(v.2).ldf

MS/MS/D collected (PCBs, 0-1').

Date: 6/4/03

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocore

Northing: 530516.6058 Easting: 128425.2314 Casing Elevation: NA

Borehole Depth: 1' below grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-7

**Client: General Electric Company** 

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

E a. u. O	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Bioring Construction
-£}								
		1	0-1	1.0	0.8		Brown fine SAND and Sil.T, trace fine Gravel, Roots and Slag.	Bonehole backfille with Bentonite.
5	-5-							
	1							
0:0-1	.0							
11/5 - 21		***********				<b>,</b>	Remarks: bgs = below ground surface; NA = Not Applica	

Project: 401.22.001 Data File:2-SS-7.dat

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Template:V:\GE_Housatonic_Mile_and_Hlalf\Notes and Data\Logs\40122(v.2).ldf Date: 6/4/03

Page: 1 of 1

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe-

Sample Method: 2" Macrocore

Northing: 530494.1535 Easting: 128417.5308 Casing Elevation: NA

Borelholle Depth: 1' below gradle

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-8

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH	ELEVATION Sample Run Number Sample/Int/Type Recovery (feet) PID Headspace (ppm) Geologic Column					Geologic Column	Stratigraphic Description	Boring Construction
-0	49+	1	0-1	1,0	0.0		Dark brown fine SAND and SILT, some Organics.	Borehole backfille with Bentonite.
	-							7. A. III
5	- 5 -							
			i					
10								
		!						
	-							
15	15 -							

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocore

Northing: 530481.6752 Easting: 128276.9677 Casing Elevation: NA

Boreholle Depth: 1' below grade

Surface Elevation: NA.

Descriptions By: RWB

Boring ID: 2-SS-9

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
						************		
-		1	0-1	1.0	0.8		Dark brown fine SAND and SILT, trace fine Gravell, and Roots.	
5	-5-							
10-	.10 -							
- 15-	1.5							
h	<u></u>					 	Remarks: bgs = bellow ground surface; NA = Not Applica Analyses: 0-1': PCBs.	

Project: 401.22.001 Data File:2-SS-9.dat

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Template:V:\GE_Housatonic_Mille_and_Half\Notes and Data\Logs\40122(v.2).ldf Date: 6/4/03 Page: 1 of 1

Auger Size: NA

Rigi Type: Tractor-mounted Power Probe

Sample Method: 2" Macrocore

Northing: 530483.1547 Easting: 128382.4897 Casing Elevation: NA

Borehole Depth: 1' below grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-10

Client: General Electric Company

Location: Housatonic River 4 1/2 Mile

Flood Plain Properties

01 01 11 11	ELEVATION	Sample Run Number	Sample/InvType	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
4 <u>5</u> }	9	1	0-1	1.0	2.3		Dark brown fine SAND and SILT, trace Roots and fine Gravel	Borelhole backfille with Bentonite.
	-				:			
5 -	5							
10-1	0-							
	-							
	-							
	_							
15-1	.5 -							
					*********			
•••						<b> </b>	Rennarks: bgs = below ground surface; NA = Not Applica Analyses: 0-1': PCBs.	able/Available.

Project: 401.22.001 Data File:2-S-10.dat

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Date: 6/4/03

Template:V:\GE_Housatonic_Mile_and_Haif\Notes and Data\Logs\40122(v.2).ldf

Page: 1 of 1

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocore

Northing: 530472.4667 Easting: 128347.8994 Casing Elevation: NA

Borehole Depth: 1' below grade

Surface Elevation: NA.

Descriptions By: RWB

Boring ID: 2-SS-11

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

Dark brown fine SA-HD and SILT. Image medium Sand, fine Gravet, and Roots  Light gray ASH and elect SILAG.  ST. S.	
-5 -5 -	
	ehole backfille Bentonile.
10-10 -	
10-10-	
- 10-10 -	
- 10-10 -	
15-15 -	
Remarks; bgs = below ground surface; NA = Not Applicable/Available.	

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Auger Size: NA

Rig Type: Tractor-mounted Power Probe

Sample Method: 2' Macrocore

Northing: 530471.5017 Easting: 128406.0622 Casing Elevation: MA

Borehole Depth: 1' below grade

Surface Elevation: NA

Descriptions By: RWB

Boring ID: 2-SS-12

Ollient: General Electric Company

Location: Housatonic River 1 1/2 Mile

Flood Plain Properties

DEPTH ELEVATION Sample Run Number Sample/InVType Recovery (feet) PID Headspace (ppm) Geologic Column					Geologic Column	Stratigraphic Description	Boring Construction		
-0	1	Ci-1	1.0	0.9		Dark brown fine SAND and SILT, trace Rooks.  Brown fine to medium SAND.	Borehole backfille with Elentonite.		
5 -5-									
10-10 -									
15-15 -									

Project: 401.22.001 Data File:2-SS-12.dat

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Template:V:\GE_Housatonic_Mile_and_Half\Notes and Data\Logs\40122(v.2).ldf Date: 6/4/03

Page: 1 of 1

## Appendix B

Complete Appendix DC+3 Analytical Results for Pre-Design Samples



### TABLE B PRE-DESIGN NON-POB APPENDIX IX+3 SOIL DATA

PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

	Sample ID:	2-5B-14	2-SB-15
	ple Depth (Faut):	5-7	4-6
Pierra innertor	Date Collected:	05/23/03	05/23/03
Volatille Organics 1,1,1,2-Tetrachloroethane			
1, 1, 1, 2- Letrachiloroethane		MC(0.0057)	ND(0.0058) [ND(0.0062)]
1,1,1-Trichlorcethane		MD(0.0057)	ND(0.0058) [ND(0.0062)]
1,1,2,2-Tetrachloroethane		ND(0.0057)	ND(0.0058) [ND(0.0062)]
1,1,2-Trichlorcethane		MD(0.0057)	ND(0.0058) [ND(0.0062)]
1,1-Dichlorcethane		MD(0.0057)	ND(0.0058) [ND(0.0062)]
1,1-Dichlorcethene		ND(0.0057)	ND(0.0058) [ND(0.0062)]
1,2,3-Trichloropropane		MD(0.0057)	ND(0.0058) [ND(0.0062)]
1,2-Dibrorno-3-chicropropan	3	MD(0.0057)	ND(0.0058) (ND(0.0062)]
1,2-Dibromoethane 1,2-Dichloroethane		ND(0.0057)	ND(0.0058) [ND(0.0062)] ND(0.0058) [ND(0.0062)]
/Bb-b-dbbkurp/		ND(0.0057)	
1,2-Dichloropropane 1,4-Dicoane		ND(0.0057)	ND(0.0058) [ND(0.0062)] ND(0.12) [ND(0.12)]
r,4-Entoxame 2-Butanome		ND(0.11) ND(0.011)	ND(0.012) [ND(0.012)]
z-Gutamone 2-Chloro-1,3-butadiene			
z-Chloroethylvinylether		ND(0.0057) ND(0.0057)	ND(0.0058) [NID(0.0062)] ND(0.0058) [NID(0.0062)]
z-Chioroethyrviinyrennei 2-Heodarione			
		ND(0.011)	ND(0.012) [ND(0.012)]
3-Chilocopropene		ND(0.0057)	ND(0.0058) [ND(0.0062)]
4-Methyl-2-peritanone Acetone		ND(0.011)	ND(0.012) [ND(0.012)]
		ND(0.023)	ND(0.023) [ND(0.025)]
Acetonitrile		ND(0.11)	ND(0.12) [ND(0.12)]
Acrolein		ND(0.11)	ND(0.12) [ND(0.12)]
Acrylonitrile		ND(0.0057)	ND(0.0058) [ND(0.0062)] ND(0.0058) [ND(0.0062)]
Benzene		ND(0.0057)	
Bromodichloornethane		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Bromoform		ND(0:0057)	ND(0.0058) [ND(0.0062)]
Bromomethane Carbon Disulfide		ND(0,0057) ND(0,0057)	ND(0.0058) [ND(0.0062)]
Carbon Tetrachloride			ND(0.0058) [ND(0.0062)]
Chlorobenzene		NID(0:0057)	ND(0.0058) [ND(0.0062)] ND(0.0058) [ND(0.0062)]
Chloroethane		ND(0.0057)	
Chloroform		ND(0.0057)	NID(0.0058) [ND(0.0062)] ND(0.0058) [ND(0.0062)]
Chloromethane		ND(0.0057) ND(0.0057)	ND(0.0058) [ND(0.0062)]
os-1,3-Dichloropropene		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Dibnornochloromethame		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Dibromomethane		ND(0.0057)	ND(0:0058) [ND(0:0062)]
Dichlorocliftuoromethane		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Ethyl Methacrylate		ND(0.0057)	ND(0.0058) [ND(0.0062)]
E thry liberruseine		ND(0.0057)	ND(0.0058) [ND(0.0062)]
lodomethane		ND(0.0057)	ND(0.0058) [ND(0.0062)]
sobutanc		ND(0.11)	ND(0.12) [ND(0.12)]
Methacrylonitale		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Methyl Methacryllate		ND(0,0057)	ND(0.0058) [ND(0.006(2)]
Methylene Chloride		ND(0.0057)	ND(0.0058) [ND(0.0082)]
Propionitrile		ND(0.011)	ND(0.012) [ND(0.012)]
Styrene		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Tetrachioroethene		MD(0.0057)	ND(0.0058) [ND(0.0052)]
Toluene		ND(0.0057)	ND(0.0058) [ND(0.0062)]
trans-1,2-Dichloroethene		ND(0.0057)	ND(0.0058) [ND(0.0062)]
trans-1,3-Dichloropropene		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Inains-1,4-Dichloro-2-buttene		MD(0.0057)	ND(0.0058) [ND(0.0062)]
Trichtoroethene		ND(0.0057)	ND(0.0058) [NID(0.0062)]
Trichlorofluoromethane		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Vinyl Acetate		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Vinyl Chloride		ND(0.0057)	ND(0.0058) [ND(0.0062)]
Xylenes (total)		ND(0.0057)	ND(0.0058) [ND(0.0062)]

## TABLE B PRE-DESIGN NON-PCB APPENDIX IX+3 SOIL DATA

PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample ID:	2-SB-14	2-SB-15
Sample Depth (Feet); Parameter Date Collected;	5-7/ 045//2/30/003	4-6 au rana (n.a.
	1434.8294.052	05/23/03
Semivolatile Organics §,2,4,5-Tetrachlorokemzeme	4.173.00 StOA	**************************************
1,2,4-Trichlorobenzene	ND(0.38) ND(0.38)	ND(0.42) [ND(0.47)] ND(0.42) [ND(0.47)]
1,2-Dichlorobenzene	ND(0.38)	ND(0:42) [ND(0:47)]
1,2-Diphenythydrazine	ND(0.38)	ND(0.42) [ND(0.47)]
1,3,5-Trinitrobenzene	ND(0.38)	ND(0.42) [ND(0.47)]
1,3-Dichlorobenzene	ND(0.38)	ND(0 42) [ND(0.47)]
1,3-Dinitrobenzene	ND(0.76)	ND(0.77) [ND(0.83)]
1,4-Dichlorobenzene	ND(0.38)	ND(0.42) [ND(0.47)]
1,4-Naphthoquinone	ND(0.76)	ND(0.77) [ND(0.83)]
1-Naphthylamine	ND(0.76)	ND(0.77) [ND(0.83)]
2,3,4,6-Tetrachlorophenol	ND(0.38)	ND(0.42) [ND(0.47)]
2,4,5-Trichlorophenol	ND(0.38)	ND(0.42) [ND(0.47)]
2,4,6-Trichlorophenol	ND(0.38)	ND(0.42) [ND(0.47)]
2,4-Dichlorophenol	ND(0.38)	ND(0.42) [ND(0.47)]
2,4-Dimethylphenol	ND(0.38)	ND(0.42) [ND(0.47)]
2,4-Dinitrophenol	ND(1.9)	ND(2.1) [ND(2.4)]
2,4-Dinitrotoluene	ND(0.38)	ND(0.42) [ND(0.47)]
2,6-Dichlorophenol	ND(0.38)	ND(0.42) [ND(0.47)]
2,6-Dinitrotoluene	ND(0.38)	ND(0.42) [ND(0.47)]
2-Acertykamiinofluorene	ND(0.76)	ND(0.77) [ND(0.83)]
2-Chloronaphthadene	ND(0.38)	ND(0.42) [ND(0.47)]
2-Chlorophenol	ND(0.38)	ND(0.42) [ND(0.47)]
2-Methylmaphthalene	ND(0.38)	ND(0.42) [ND(0.47)]
2-Methylphenol	ND(0.38)	ND(0.42) [ND(0.47)]
2-Naphthylamine	ND(0.76)	ND(0.77) [ND(0.83)]
2-Nitroaniline	ND(1.9)	ND(2.1) [ND(2.4)]
2-Nitrophenol	ND(0.76)	ND(0.77) [ND(0.83)]
2-Picoline	ND(0.38)	ND(0.42) [ND(0.47)]
384-Methylphenol 3,3'-Dichlorobenzidine	ND(0.76)	ND(0.77) [ND(0.83)]
5,3 -coignigacemaignile 3,3'-Dinnethylbertzigline	ND(0.76)	ND(0.84) [ND(0.94)]
3-Methylcholanthnene	ND(0.38) ND(0.76)	ND(0.42) [ND(0.47)] ND(0.77) [ND(0.83)]
3-Mitroaniline	ND(1.9)	ND(2.1) [ND(2.4)]
4,6-Dinitro-2-methylphenol	ND(0.38)	ND(0.42) [ND(0.47)]
4-Arninobiphenyl	ND(0.76)	ND(0.77) [ND(0.83)]
4-Bromophenyl-phenylether	ND(0.38)	ND(0.42) [ND(0.47)]
4-Chloro-3-Methylphenol	ND(0.38)	ND(0.42) [ND(0.47)]
4-Chloroaniline	ND(0.38)	ND(0.42) [ND(0.47)]
4-Chlorobenzilate	ND(0.76)	ND(0.77) [ND(0.83)]
4-Chlorophenyl-phenylether	ND(0.38)	ND(0.42) [ND(0.47)]
4-Nitroaniline	ND(1.9)	ND(2.0) [ND(2.1)]
4-Nitrophenol	ND(1.9)	ND(2.1) [ND(2.4)]
4-Mitroquinoline-1-oxide	ND(0.76)	ND(0.77) [ND(0.83)]
4-Phenylenediamine	ND(0.76)	ND(0.77) [ND(0.83)]
5-Nitro-o-toluidine	ND(0.76)	ND(0.77) [ND(0.83)]
7,12-Dimethylbenz(a)anthracene	ND(0.76)	ND(0.77) [ND(0.83)]
a,a'-Dirnethylphenethylamine	ND(0.76)	ND(0.77) [ND(0.83)]
Accemagatithene	ND(0.38)	ND(0.42) [ND(0.47)]
Accemagnithylence	ND(0.38)	ND(0.42) [ND(0.47)]
Acetophenone	ND(0.38)	ND(0.42) [ND(0.47)]
Ariline	MD(0.38)	ND(0.42) [ND(0.47)]
Anthracene	MD(0.38)	ND(0.42) [ND(0.47)]
Aramite	ND(0.76)	ND(0.77) [ND(0.83)]
Benzidine	ND(0.76)	ND(0.84) [ND(0.94)]
Benzo(a)anthracene	ND(0.38)	ND(0.42) [ND(0.47)]
Benzo(a)pyrene	ND(0.38)	ND(0.42) [ND(0.47)]
Benzo(b)fluoranthene Benzo(g,h,i)perylene	ND(0.38) ND(0.38)	ND(0.42) [ND(0.47)] ND(0.42) [ND(0.47)]
CHEST LAND AND AND THE CHEST AND THE CONTROL OF THE	1741 1111 .5751	PH NO 42 (INDINO 471)

## TABLE B PRE-DESIGN NON-PCB APPENDIX DOS SOIL DATA

## PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

	Sample ID:	2-SB-14	2-SB-15
	Sample Depth (Foot):	5-7	4-6 out./pro-to-p
r (2 i green) 1000 Hermania (2 i green) Champaia (2 i green) (2 i green) in ea	Date Collected:	05/2:3/03	05/23/03
Semivolatile Organics	(CONTRIBUTE CO.)	NID(0.76)	NEC 240 D. 4 V. F. F. F. Z. C. 4 V.
Benzyl Alcohol		NILJ(UL70)	ND(0.84) [ND(0.94)]
ois(2-Chloroethoxy)mett	THAINE	ND(0.38)	ND(0.42) [ND(0.47)]
bis(2-Chloroethyl)ether		NID(0.38) NID(0.38)	ND(0.42) [ND(0.47)]
ois(2-Chloroisopropyl)et bis(2-Ethylinexyl)pinthala		ND(0.38)	NID(0.42) [NID(0.47)] NID(0.38) [NID(0.41)]
Butylbenzylphthalate	1 he:	ND(0:38)	ND(0.42) [ND(0.47)]
Chinyseine		ND(0.38)	ND(0.42) [ND(0.47)]
Diallate		NID(0.76)	ND(0.77) [ND(0.83)]
Dibenzo(a,h)anthracene	·····	ND(0.38)	ND(0.42) [ND(0.47)]
Dibenzofuran		ND(0 38)	ND(0.42) [ND(0.47)]
Diethylphthalate		ND(0.38)	ND(0.42) [ND(0.47)]
Dimethylphthalate		ND(0 B)	ND(0.42) [ND(0.47)]
Di-n-Butylphthalate		ND(0.38)	ND(0.42) [ND(0.47)]
Di-n-Octylphthalate		ND(0.38)	ND(0.42) [ND(0.47)]
Diphenylamine		ND(0.38)	ND(0.42) [ND(0.47))
Ethyl Methanesulfonate		ND(0.38)	ND(0.42) [ND(0.47)]
Fluoranthene		ND(0.38)	ND(0:42) [ND(0:47)]
Fluorene		ND(0.38)	ND(0.42) [ND(0.47)]
Hexachlorobenzene		ND(0.38)	ND(0.42) [ND(0.47)]
Hexachlorobutadiene		ND(0.38)	ND(0.42) [ND(0.47)]
Hexachlorocyclopentaid	i.e:(1)(8)	ND(0.38)	ND(0.42) [ND(0.47)]
Hexaichloroethane		ND(0.38)	ND(0.42) [ND(0.47)]
Hexachlorophene		ND(0.76)	ND(0.84) [ND(0.94)]
Hexachloropropene		ND(0.38)	ND(0.42) [ND(0.47)]
Indeno(1.2,3-cd)pyrene		ND(0.38)	ND(0.42) [ND(0.47)]
Isodrin		ND(0.38)	ND(0.42) [ND(0.47)]
Isophorone		ND(0.38)	ND(0.42) [ND(0.47)]
Isosafrole		ND(0.76)	ND(0.77) [ND(0.83)]
Methapyrilene		ND(0.76)	ND(0.77) [ND(0.83)]
Methyl Methanesulfona	(E)	ND(0.38)	ND(0.42) [ND(0.47)]
Naphthalene		ND(0.38)	ND(0.42) [ND(0.47)]
Nitrobenzene		ND(0.38)	ND(0.42) [ND(0.47)]
Ni-Nitrospodierthylanning		ND(0.38)	ND(0.42) [ND(0.47)]
N-Nitrosodimethylamina N-Nitroso-di-n-burtylamin	)	ND(0.38)	ND(0.42) [ND(0.47)] ND(0.77) [ND(0.83)]
N-Nitroso-di-n-piropylärr	1 PG!	ND(0.76)   ND(0.38)	ND(0.42) [ND(0.47)]
N-Nitrosodiphenylarnina		ND(0.38)	ND(0.42) [ND(0.47)]
N-Nitrosomethylethylam		ND(0.76)	ND(0.77) [ND(0.83)]
N-Nitrosomorpholine	151757	ND(0.38)	ND(0.42) [ND(0.47)]
N-Nitrosopiperidine		ND(0.38)	ND(0.42) [ND(0.47)]
N-Nitrosopyrrolidine		NC(0.76)	ND(0.77) [ND(0.83)]
o,o,c-Triethylphosphon	ntitri incente	ND(0.38)	ND(0.42) [ND(0.47)]
o-Toluidine		ND(0.38)	ND(0.42) [ND(0.47)]
p-Dimethylaminoazobei	nzene	ND(0.76)	ND(0.77) [ND(0.83)]
Pentachlorobenzene		ND(0.38)	ND(0.42) [ND(0.47)]
Pentachloroethane		ND(0.38)	ND(0.42) [ND(0.47)]
Pentachloronitrobenzen	HE:	ND(0.76)	ND(0.77) [ND(0.83)]
Pentachlorophenol		ND(1.9)	ND(2.1) [ND(2.4)]
Phenacetin		ND(0.76)	ND(0.77) [ND(0.83)]
Phenanthrene		ND(0.38)	ND(0.42) [ND(0.47)]
Phenol		ND(0.38)	ND(0.42) [ND(0.47)]
Pronamide		ND(0.38)	ND(0.42) [ND(0.47)]
Pyrene		MD(0.38)	ND(0.42) [ND(0.47)]
Plymiclane		MD(0.38)	ND(0.42) [ND(0.47)]
Safrole		ND(0.38)	ND(0.42) [ND(0.47)]
Thiomazin		ND(0.38)	ND(0.42) [ND(0.47)]

## TABLE B PRE-DESIGN NON-PCB APPENDIX IX+3 SOIL DATA

PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

	Sample ID:	2-SB-14	2-\$B-15
	Sample Depth (Feet):	5-7	46
Parameter	Date Collected:	05/23/03	05/23/03
Furans			
2,3,7 8-TCDF		ND(0.0000014)	ND(0.0000013) [ND(0.0000013)]
TCDFs (total)		ND(0.0000014)	ND(0.0000013) [ND(0.0000013)]
1,2,3.7,8-PeCDF		ND(0.0000028)	ND(0.0000028) [0.0000014 J]
2,3,4.7,8-P@CDF		ND(0.0000028)	ND(0,0000028) [ND(0,0000014) X]
PeCDFs (total)		ND(0.0000028)	0.0000013 [0.0000014]
1,2,3,4,7,8-HxCDF		ND(0.0000028)	ND(0.0000028) (ND(0.0000017) X}
1,2,3,6,7,8-HxCDF		ND(0.0000028)	ND(0.0000028) [0.0000015 J]
1,2,3,7,8,9-HxCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000024) X]
2,3,4.6,7,8-HxCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000015) X]
HxCDFs (total)		ND(0.0000028)	ND(0.0000028) [0.0000015]
1,2,3,4,6,7,8-HpCDF		MD(0.0000028)	ND(0.0000028) [ND(0.0000033) X]
1,2,3 4,7,8,9-HpCDF		ND(0.0000028)	ND(0.0000028) [ND(0.0000030)]
HpCDFs (total)		MD(0.0000028)	ND(0.0000028) [ND(0.0000030)]
OCDF		ND(0.0000055)	ND(0.0000060) [ND(0.0000052) X]
Dioxins			
2,3,7,8-TCDD		MD(0.0000019)	ND(0.0000017) [ND(0.0000018)]
TCDDs (total)		ND(0.0000022)	ND(0.0000024) [ND(0.0000024)]
1,2,3,7,8-PeCDD		MD(0.0000028)	ND(0.0000028) [ND(0.0000030)]
PeCDDs (total)		MD(0.0000033)	ND(0.0000037) [ND(0.0000039)]
1,2,3,4,7,8-FbcCDD		MD(0.0000028)	ND(0.0000028) [ND(0.0000030)]
1,2,3,6,7,8-HxCDD		MD(0.0000028)	ND(0.0000028) [ND(0.0000030)]
1,2,3,7,8,9-HxCDD		ND(0.0000028)	ND(0.00000028) [0.00000020 J]
HxCDDs (total)		ND(0.0000028)	ND(0,0000046) [0 0000020]
1,2,3,4,6,7,8-HpCDD		MD(0.0000028)	0.0000019 J [ND(0.0000032) X]
HpCDDs (total)		ND(0.0000028)	0.0000019 [ND(0.0000031)]
OCDD		ND(0.000011) X	0.000011 J [ND(0.000012) X]
Total TEQs (WHO TER	S)	0.0000042	0.0000041 [0.0000038]
Inorganics Actimony			PARTITION OF THE PROPERTY OF T
		0.820 B	1.50 B [ND(6.00)]
Arsenic		8,80	7.10 [8.20]
Barium		40.0	42.0 (40.0)
Beryllium		0.450 B	0.430 B [0.480 B]
Cadmium Chromium		0.240 B 9.40	0.140 B [0.140 B] 9.60 [10.0]
Cobalt			13.0 [15.0]
Copper		1.50 280	15.0 [25.0]
Cyanide		ND(0.460)	0.0570 B [0.0440 B]
Lead		12.0	8.60 [9.40]
Mercury		0.0280 B	0.0530 B [0.0740 B]
Nicke		26.0	20.0 [27.0]
Selenium		ND(1.00)	1.10 (ND(1.00))
Silver		0.140 B	0.160 B [0.180 B]
Sulfide		40.0	7.40 [7.90]
Thallium		ND(1.10)	1.40 [ND(1.20)]
Tim		3,00 B	4.60 B [4.00 B]
Vanadium		8, 20	9 40 [8.70]
Zime		79.0	89.0 [82.0]

### TABLE 8 PRE-DESIGN NON-PCB APPENDIX IX+3 SOIL DATA

## PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS (Results are presented in dry weight parts per million, ppm)

### Notes:

- 1 Samples were collected by Blasland Bouick & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of Appendix IX+3 constituents.
- ND Amalyte was not detected. The number in parentheses is the associated detection limit.
- Total 2.3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Flactors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
- 4. Field duplicate sample results are presented in brackets.

### Data Qualifiers:

#### Organics (volatiles, semivolatiles, choxin/funans)

- J Indicates an estimated value less than the practical quantitation limit (PQL)
- X Estimated maximum possible concentration.

### Inorganics

Bi- Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

## Appendix C

**Data Validation Report** 



## APPENDIX C SOIL SAMPLING DATA VALIDATION REPORT

# PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 PROPERTIES ADJACENT TO THE 1½ MILE REACH

### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

### 1.0 General

This appendix summarizes the Tier I and Tier II data reviews performed for soil samples collected as part of pre-design investigation activities for these properties on Phase 2 of the 1½ Mile Reach of Housatonic River. located in Pittsfield, Massachusetts. The samples were analyzed for various constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents — benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (hereafter referred to as Appendix IX+3), excluding pesticides and herbicides, by CT&E Environmental Services, Inc. of Charleston, West Virginia. Data validation was performed for 61 polychlorinated biphenyl (PCB) samples, five volatile organic compound (VOC) samples, four semi-volatile organic compound (SVOC) samples, four polychlorinated dibenzo-p-dioxin (PCDD)/polychlorinated dibenzo-furan (PCDF) samples, four metals samples, and four cyanide/sulfide samples.

### 2.0 Data Evaluation Procedures

This appendix outlines the applicable quality control criteria utilized during the data review process and any deviations from those criteria. The data review was conducted in accordance with the following documents:

- Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland, Bouck & Lee, Inc. ([BBL]; FSP/QAPP, approved November 4, 2002 and resubmitted December 10, 2002);
- Region I Tiered Organic and Inorganic Data Validation Guidelines, USEPA Region I (July 1, 1993);
- Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses. USEPA Region I (June 13, 1988) (Modified February 1989):
- Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses, USEPA Region I (February 1, 1988) (Modified November 1, 1988);
- Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses, USEPA Region I (Draft, December 1996); and
- National Functional Guidelines for Dioxin/Furan Data Validation, USEPA (Draft, January 1996).

A tabulated summary of the Tier I and Tier II data evaluations is presented in Table C-1. Each sample subjected to evaluation is listed in Table C-1 to document that data review was performed, as well as present the highest level of data validation (Tier I or Tier II) that was applied. Samples that required data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers have been used in this data evaluation.

- J The compound or analyte was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound or analyte is detected at estimated concentrations less than the practical quantitation limit (PQL).
- U The compound or analyte was analyzed for, but was not detected. The sample quantitation limit is presented and adjusted for dilution and (for solid samples only) percent moisture. Non-detected sample results are presented as ND(PQL) within this report and in Table C-1 for consistency with previous documents prepared for this investigation.
- UJ The compound or analyte was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual level of quantitation. Non-detected sample results that required qualification are presented as ND(PQL) J within this report and in Table C-1 for consistency with previous documents prepared for this investigation.
- R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purposes.

### 3.0 Data Validation Procedures

The FSP/QAPP provides (in Section 7.5) that all analytical data will be validated to a Tier I level following the procedures presented in the *Region I Tiered Organic and Inorganic Data Validation Guidelines* (USEPA guidelines). Accordingly, 100% of the analytical data for these investigations were subjected to Tier I review. The Tier I review consisted of a completeness evidence audit, as outlined in the *USEPA Region I CSF Completeness Evidence Audit Program* (USEPA Region I, 7/31/91), to ensure that all laboratory data and documentation were present. A tabulated summary of the samples subjected to Tier I and Tier II data evaluation is presented below.

Summary of Samples Subjected to Tier I and Tier II Data Validation

		Tier I Only		***************************************			
Parameter "	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	Total
PCBs	41	0	2	17	0	]	61
VOCs	0	0	0	3	1	1	5
SVOCs	0	0	0	3	0	1	4
PCDDs/PCDFs	0	0	0	3	0	1	4
Metals	0	0	0	3	0 ;	1	4
Cyanide/Sulfide	0	0	0	3	0	1	4
Total	41	0	2	32	]]	6	82

In the event data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages complied with USEPA Region I Tier I data completeness requirements.

As specified in the FSP/QAPP, approximately 25% of the laboratory sample delivery group packages were randomly chosen to be subjected to Tier II review. A Tier II review was also performed to resolve data usability limitations identified from laboratory qualification of the data during the Tier I data review. The Tier II data review consisted of a review of all data package summary forms for identification of quality assurance/quality control (QA/QC) deviations and qualification of the data according to the Region I Data Validation Functional Guidelines. Due to the variable sizes of the data packages and the number of data qualification issues identified during the Tier I review, approximately 48% of the data were subjected to a Tier II review. The Tier II review resulted in the qualification of data for several samples due to minor QA/QC deficiencies. Additionally, all field duplicates were examined for relative percent difference (RPD) compliance with the criteria specified in the FSP/QAPP.

When qualification of the sample data was required, the sample results associated with a QA/QC parameter deviation were qualified in accordance with the procedures outlined in USEPA Region I data validation guidance documents. When the data validation process identified several quality control deficiencies, the cumulative effect of the various deficiencies was employed in assigning the final data qualifier. A summary of the QA/QC parameter deviations that resulted in data qualification is presented below for PCBs.

### 4.0 Data Review

Initial calibration criterion for organic analyses requires that the average relative response factor (RRF) has a value greater than 0.05. Sample results were qualified as estimated (J) when this criterion was exceeded. The compounds that exceeded initial calibration criterion and the number of samples qualified are presented below.

Analysis Qualified Due to Initial Calibration Deviations

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	1.4-Dioxane	3	J
	2-Chloroethylvinylether	2.	J
	Acetonitrile	5	J
	Acrolein	5	J
	Isobutanol	5	J
SVOCs	Hexachlorophene	4	J

Continuing calibration criterion for organic analyses requires that the continuing calibration RRF have a value greater than 0.05. Sample results were qualified as estimated (J) when this criterion was exceeded. The compound that exceeded continuing calibration criterion and the number of samples qualified are presented below.

Analysis Qualified Due to Continuing Calibration RRF Deviations

Analysis	Compound	Number of Affected Samples	Qualification	
VOCs .	2-Butanone	2	J	

The rejection of sample data for select organic analysis due to low calibration response factors is an inherent problem with the current analytical methodology. Several of the organic compounds (including the compounds presented in the two tables above detailing RRF deviations) exhibit instrument response factors that are below the USEPA Region I minimum value of 0.05, but meet the analytical method criterion, which does not specify minimum response factors for these compounds. Additional sampling and re-analysis of these compounds is

not recommended because these compounds are not a constituent of concern for this investigation, and subsequent re-analyses would also be subject to the same analytical performance limitations.

Initial calibration criterion for SVOCs requires that the percent relative standard deviation (%RSD) must be less than or equal to 30%. Sample data for detected and non-detected compounds with %RSD values greater than 30% were qualified as estimated (J). The compounds that exceeded initial calibration criterion and the number of samples qualified due those exceeded are identified below.

Compounds Qualified Due to Initial Calibration %RSD Deviations

Amalysis	Compound	Number of Affected Samples	Qualification
SVOCs	2,4-Dinitrophenol	4	J
	4-Nitrophenol	4	J
	Hexachlorocyclopentadiene	4	J

The continuing calibration criterion requires that the %D between the initial calibration RRF and the continuing calibration RRF for VOCs and SVOCs be less than 25%. Sample data for detected and non-detected compounds with %D values that exceeded the continuing calibration criterion were qualified as estimated (J). A summary of the compounds that exceeded continuing calibration criterion and the number of samples qualified due to those deviations are identified below.

Compounds Qualified Due to Continuing Calibration of %D Values

Analysis	Compound	Number of Affected Samples	Qualification	
VOCs	1,2,3-Trichtoropropane	2	J	
	Chloromethane	3	J	
	2-Butanone	2	J	
SVOCs	4-Nitroquinoline-1-oxide	4	J	
	Benzidine	4	J	
	Benzyl Alcohol	4	J	
	o.o.oTriethylphosphorothioate	4	J	
	Pronamide	4	J	

Contract required detection limit (CRDL) standards were analyzed to evaluate instrument performance at low-level concentrations that are near the analytical method PQL. These standards are required to have recoveries between 80 and 120% to verify that the analytical instrumentation was properly calibrated. When CRDL standard recoveries exceeded the 80 to 120% control limits, the affected samples with detected results at or near the PQL concentration (less than three times the PQL) were qualified as estimated (J). The analytes that exceeded CRDL criteria and the number of samples qualified due to those deviations are presented below.

Analytes Qualified Due to CRDL Standard Recovery Deviations

Analysis	Analyte	Number of Affected Samples	Qualification
Inorganies	Antimony	3	J
1	Selenium	3	J
	Thallium	3	j

Field, laboratory, and method blanks were analyzed to evaluate whether field sampling equipment or laboratory background contamination may have contributed to the reported sample results. When detected analytes were identified in a blank sample, blank action levels were calculated at five times the blank concentration for all detected analytes. Detected sample results that were below the blank action level were qualified as "U." The analytes/compounds detected in the method blanks and which resulted in qualification of sample data are presented below.

Analytes Qualified Due to Blank Deviations

Analysis	Compound	Number of Affected Samples	Qualification	
Inorganics	Tin	3	U	

Matrix spike (MS)/matrix spike duplicate (MSD) sample analysis recoveries for organics must be within the laboratory-generated QC acceptance limits specified on the MS reporting form. Organic sample results that exceeded laboratory-generated QC acceptance limits and have MS recoveries greater than 10% were qualified as estimated (J). Compounds that did not meet MS recovery criteria and the samples qualified due to those deviations are presented below.

Compounds Qualified Due to MS Recovery Deviations

Analysis	Compounds	Number of Affected Samples	Qualification	
SVOCs	N-Nitroso-di-n-propylamine	1	J'	

MS sample analysis recovery criteria for organics require that the RPD between the MS and MSD be less than the laboratory-generated QC acceptance limits specified on the MS reporting form. The compounds that exceeded RPD limits and the number of samples qualified due to deviations are presented below.

Compounds Qualified Due to Matrix Spike RPD Deviations

Analysis	Compounds	Number of Affected Samples	Qualification
SVOCs	1,2,4-Trichlorobenzene	1	J
	4-Nitrophenol	1.	j
	Acenaphthene	1	j

### 5.0 Overall Data Usability

Tier I and Tier II data validation reviews. The percent usability calculation also includes quality control samples collected to aid in the evaluation of data usability. Therefore, field/equipment blank, trip blank, and field duplicate data determined to be unusable as a result of the validation process are represented in the percent usability value tabulated below.

Data Usability

Parameter	Percent Usability	Rejected Data
Inorganies	100	None
Cyanide and Sulfide	100	None
VOCs	; 100	None
SVOCs	100	None
PCBs	100	None

Data Usability

Parameter	Percent Usability	Rejected Data
PCDDs/PCDFs	100	None

The data package completeness as determined from the Tier I data review was used in combination with the data quality deviations identified during the Tier II data review to determine overall data quality. As specified in the FSP/QAPP, the overall precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters determined from the Tier I and Tier II data reviews were used as indicators of overall data quality. These parameters were assessed through an evaluation of the results of the field and laboratory QA/QC sample analyses to provide a measure of compliance of the analytical data with the Data Quality Objectives (DQOs) specified in the FSP/QAPP. Therefore, the following sections present summaries of the PARCC parameters assessment with regard to the DQOs specified in the FSP/QAPP.

### 5.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included laboratory duplicates, field duplicates, MS/MSD samples, and ICP serial dilution samples. For this analytical program, 0.3% of the data required qualification MS/MSD RPD deviations. None of the data required qualification for laboratory duplicate RPD deviations. ICP serial dilution deviations or field duplicate RPD deviations.

### 5.2 Accuracy

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, Laboratory Control Standards (LCSs), MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 5.2% of the data required qualification for calibration deviations. None of the data required qualification for LCS recovery deviations, CRDL standard recoveries, internal standard recoveries, or surrogate compound standard recoveries.

### 5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in Agency-approved work plans and by following the procedures for sample collection/analyses described in the FSP/QAPP. Additionally, the analytical program used procedures that were consistent with USEPA-approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical program, none of the data required qualification for exceeding holding time requirements.

### 5.4 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. The USEPA SW-846¹ analytical methods presented in the FSP/QAPP are updated on occasion by the USEPA to benefit from recent technological advancements in analytical chemistry and instrumentation. In most cases, the method upgrades include the incorporation of new technology that improves the sensitivity and stability of the instrumentation or allows the laboratory to increase throughput without hindering accuracy and precision. Overall, the analytical methods for this investigation have remained consistent in their general approach through continued use of the basic analytical techniques (i.e., sample extraction/preparation, instrument calibration, QA/QC procedures, etc.). Through this use of consistent base analytical procedures and by requiring that updated procedures meet the QA/QC criteria specified in the FSP/QAPP, the analytical data from past, present, and future sampling events will be comparable to allow for qualitative and quantitative assessment of site conditions.

### 5.5 Completeness

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses — the generation of a sufficient amount of valid data. The actual completeness of this analytical data for individual analytical parameters and overall usability of this data set is 100%.

¹ Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III. December 1996.

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### TABLE C-1 ANALYTICAL DATA VALIDATION SUMMARY

## PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1/12 MILE REACH

Sample	]	T	]						**************************************		
Delivery	1	Clatte		Validation							
Group No.	Sample ID	Collected	Miadorix	L.erv@{	Chuail ifficiatiioin	Сканпирканциянов	QAAQC Parameter	Value	Control Limits	Qualified Result	Motes
PCBs			<b>,</b>		.,			<b></b>	.,	<b>;</b>	
3E0P352	2-85-1 (0 - 1)	5/15/2003	Soil	Tier I	No.						
3E0P352	2-55-10 (0 - 1)	5/1 5/2/003	Soil	Tier I	No No						
3E0P352	2-88-11 (0 - 1)	5/15/2/003	Soi	Tier I	No No						
3E0P352	2-SS-12 (0 - 1)	5/15/2003 5/15/2003	Soil	Tier I Tier I							
3E0P352 3E0P352	2-SS-2 (0 - 1)	5/15/2003	Soil Soil	Tier I	No No						
3E0P352	2-SS-3 (0 - 1) 2-SS-4 (0 - 1)	5/15/2003	Soil	Tier I	No						
3E0P352	2-SS-5 (0 - 1)	5/15/2003	Soil	Tier I	No.				*		
3E0P352	2-55-6 (0 - 1)	5/15/2003	Soil	Tier I	No						
3E0P352	2-SS-7 (0 - 1)	5/15/2003	Soil	Tier I	No						
3E0P352	2-SS-8 (0 - 1)	5/15/2003	Soil	Tier I	Nio						
3E:0P352	2-SS-9 (0 - 1)	5/15/2003	So⊩	Tien I	PNI0			†	<b>†</b>		
36:0P352	2-SS-DUP-1 (0 - 1)	5/15/2003	Soil	Tier I	No				 		2-8-5-7
3EDP352	RB-051503	5/15/2003	Water	Tiken I	No						
34E90IP 5908	2-\$B-1 (0 - 1)	5/2:2/2003	Soil	77k8x11	No						
3(E)(0)P 5)(0)8	2-SB-1 (1 - 3)	5/2:2/2003	Soil	Tilen F	No						
3(E)OHP 5VOVB	2-SB-1 (3 - 5)	5/2/2/2003	Sort	Tikear I	No				<b></b>		
3(E)0(P50)8	2-SB-2 (0 - 1)	5/2:2/2003	Soil	Tier I	No						
3E0P508	2-SB-2 (1 - 3)	5/2:2/2003	Soil	Tier I	No No				<b></b>	 	
3E0P508 3E0P508	2-SB-2 (3 - 5) 2-SB-3 (0 - 1)	5/22/2003	Soil Soil	Tier   Tier	No No		·				
3E0P508	[2-\$B-3 (1 - 3)	5/2:2/2003	Soil	Tier I	No No						
3E0P508	2-SB-3 (3 - 5)	5/2:2/2003	Soil	Tier I	No			ļ			
3E0P508	RB-052203-1	5/22/2003	Water	Tier I	No			<b> </b>			
3E0P538	2-SB-14 (7 - 9)	5/23/2003	Soil	Tier II	No						
3E0P538	2-SB-15 (6 - 8)	5/23/2003	Soil	Tier II	No					·	
3E:0P538	2-SB-16 (0 - 1)	5/23/2003	Soil	Tier II	No			<b></b>	1	····	
3E:0P538	2-SB-16 (1 - 3)	5/23/2003	Soil	Tier II	No					**************************************	
3EOP538	2-\$B-16 (3 - 5)	5/23/2003	Soil	Tier II	No						
3E0P538	2-\$6-4 (0 - 1)	5/23/2003	Soil	Tier II	No						
3E0P538	2-SB-4 (1 - 3)	5/23/2003	Soil	Tier II	No						
3EOP538	2-\$8-4 (3 - 5)	5/23/2003	Soil	Tier II	No					»	
3/EOP538	2-SB-5 (0 - 1)	5/23/2003	Soil	Tier II	No			ļ	ļ		
3EOP538	2-SB-5 (1 - 3)	5/23/2003	Soil	Tier II	No						
3E:0P538	2-SB-5 (3 - 5)	5/23/2003	Soil	Tier II	No No		····				
3E0P538	2-SB-6 (0 - 1)	5/23/2003	Soil	Tier II	No No			<b></b>			
3/E0P53/8	2-58-6 (1 - 3)	5/23/2003 5/23/2003	Soil Soil	Tier II	No No						
3E0P538 3E0P538	2-SB-6 (3 - 5) 2-SB-7 (3 - 6)	5/23/2003	Soil	Tier II	Mo						
380P538	[2-86-7 (5 - 6)] [2-86-7 (6 - 10)	5/23/2003	Soil	Tier II	No			<b></b>			
3E0P538	[2-SB-DUP-2 (1 - 3)	5/23/2003	Soil	Tier II	No			<b></b>		**	2-SB-5
3EOP538	RE-052303-1	5/23/2003	Water	Tier II	No		·				ik later of

## PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOOIDPLAIN PROPIERTIES ADJACENT TO THE 1-1/2 MILLE REACH

Sample Delivery		Darter		Validation							
	Sample ID	Collected	Martrix	Level	Qualification	Compound	GA/GC Parameter	Value	Control Limits	Qualified Result	Nicothers
12xC 12 c. (c. c. seller	100001113113 1137 100000111				436746111110-0-010-0-1	72-67-13 P2-7-7-13-14-14-14-14-14-14-14-14-14-14-14-14-14-		A 18 ( 5 13			
1710/828 [1,12111311	iuwavdi) [2-58-10 (3 - 6)	Leven	1 7 7 7		1						.,,
3E0P562	[2-5H-10 (3 - 6)	5/27/2003	Soil Soil	Tier I	No No						
	2-SB-10 (6 - 10)		Soil	Tier I	No						
	2-SB-11 (10 - 12)	5/27/2003			4						
	2-SB-11 (3 - 6)	5/27/2003	Soil	Tier I	No	***************************************					
	2-SB-11 (6 - 10)	5/27/2003	Soil	Tier I	No						
	2-SB-13 (3 - 5)	5/27/2003	Soi)	Tier I	No						
3E0P562	2-SB-13 (5 - 7)	5/27/2003	Soil	Tier 1	No						
3E0P562	2-SB-8 (10 - 15)	5/27/2003	Soil	Tier !	No						
3E0P562	2-SB-8 (3 - 6)	5/27/2003	Soil	Tier I	No						
3E0P562	2-SB-8 (6 - 10)	5/27/2003	Soil	Tier I	No						·
3E0P562	2-SB-9 (10 - 15)	5/27/2003	Soil	Tier I	No						
3E0P562	2-SB-9 (3 - 6)	5/27/2003	Soil	Tier I	No						
3E0P562	2-SB-9 (6 - 10)	5/27/2003	Soil	Tier I	No						
3E0P562	2-SB-DUP-4 (6 - 10)	5/27/2003	Soil	Tier I Tier I	No No		.,.				2-5B-9
3E0P562	RB-052703-1	5/27/2003	VVarier						·		·
	2-SB-1 (5 - 7)	5/22/2003	Soil	Tier I	No						
	2-SB-2 (5 - 7)	5/22/2003	Soil	Tier I	No						
	2-SB-14 (5 - 7)	5/23/2003	Soil	Tier I	No				<b></b>	)	
3F0P332	12-SB-15 (4 - 6)	5/23/2003	Soi⊫	Tier I	No					 	
Mertales									· · · · · · · · · · · · · · · · · · ·	,	· y===-<-b
3E0P538	2-SB-14 (5 - 7)	5/23/2003	Soi⊩	Tier II	Yes	Antimony	CRDL Standard %R	141.6%	80% to 120%	0.820 J	
						Selenium	CIRDL Standard %R	77.1%	80% to 120%	ND(1.00) J	
						Thallium	CIRDL Standard %R	77.0%	80% to 120%	ND(1.10) J	·
						Tin	Method Blank		·	ND(10)	
3E0P538	2-SB-15 (4 - 6)	5/23/2003	Soi⊩	Tier II	Yes	Auntirrecodey	CIRDL Standard %R	141.6%	80% to 120%	1.50 J	<u> </u>
						Selenium	CRDL Standard %R	77.1%	80% to 120%	1.10 J	
						Thallium	CRDL Standard %R	77.0%	80% to 120%	1.40 J	
	  -	ļ	ļļ			Tirr	Method Blank			ND(10)	
3E0P538	2-SB-DUP-3 (4 - 6)	5/23/2003	Soi⊩	Tier II	1	Auntirracing	CRDL Standard %R	141.6%	80% to 120%	ND(6.00) J	2-SB-15
						Selenium	CRDL Standard %R	77.1%	80% to 120%	ND(1.00) J	
						Thalium	CRDL Standard %R	77.0%	80% to 120%	ND(1.20) J	
	ļ					Tiri	Method Blank			ND(10)	
3E0P538	RtB-052303-1	5/23/2003	Water	Tier II	No						

## PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 4 1/2 MILE REACH

Sample Delivery		Charbe-		Validation							
Group No.	Sample ID	Collected	Materbe	L. erwiel	Chradification	Сконппурконытие!	QM/QIC Parameter	Value	Control Limits	Qualified Result	Notes
/OCs	•••••										
BEOP538	2-SB-14 (5 - 7)	5/23/2003	Soi⊩	Tier II	Y'e:s	1,4-Diocarre	ICAL RRE	0.010	>0.05	ND(0.11) J	
					Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.11) J		
						Akonolein	ICAL REF	0.005	>0.05	ND(0.11) J	
					Chloromethane:	CCAL %D	28.8%	<25%	ND(0.0057) J		
					Isobutanol	ICAL RRE	O.OC14	>0.05	ND(0.11) J		
E0P538	DP538 2-SB-15 (4 - 6) 5/23/20	5/23/2003	Soil	Tier II	Yes	1,4-Dioxarie	ICAL REF	0.010	>0.05	ND(0.12) J	
	}					Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.12) J	
			l i			Acrolein	ICAL REF	0.005	>0.05	ND(0.12) J	
						Chlorometharia	CCAL %D	28.8%	<25%	NID(0.0058) J	
	1		i .			Isobuitanol	ICAL REF	0.004	>0.05	ND(0.12) J	
E0P538	2-SB-DUP-3 (4 - 6)	5/23/2003	Soil	Tier II		1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.12) J	2-SB-15
			i			Acetonitrile	ICAL REF	0.041	>0.05	ND(0.12) J	
						Acrotein	ICIAL RRIF	0.005	>0.05	ND(0.12) J	
						Chiloromethania	CICAL %D	28.8%	<25%	ND(0.0062) J	
			L			Isotrutanol	ICIAL RRIF	0.004	>0.05	ND(0.12) J	
E0P538	RB-052303-1	5/23/2003	Water	Tier II	Yes	1,2,3-Trichloropropense	CICAL %D	32.4%	<25%	ND(0.0050) J	
	İ					2-Butanone	CICAL RIRE	0.046	>0.05	ND(0.010) J	
						2-Cibioroethylvinylether	ICIAL RRE	0.046	>0.05	ND(0.0050) J	
						Acetonitrile	ICIAL IRRIF	0.048	>0.05	ND(0.10) J	
						Acrolein	ICAL FREE	0.001	>0.05	ND(0.10) J	
						Isotutanol	ICAL RRE	0.015	>0.05	ND(0.10) J	
			<u> </u>			Propionitale	ICAL RRF	0.014	>0.05	ND(0.010) J	
E0P538	TRIP BLANK	5/23//2003	Water	Tier II	Yes	1,2,3i-Trichloropropiants	CICAL %D	32.4%	<25%	ND(0.0050) J	
						2-Butanone	CICAL RIRE	0.046	>0.05	ND(0.010) J	
						2-Cihiloroethylvinylether	ICAL RRE	0.046	>0.05	ND(0.0050) J	
	1					Acetoninile	ICAL RRF	0.048	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.001	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRE	0.015	>0.05	ND(0.10) J	
	1	i l				Propionimile	ICAL RRF	0.014	>0.05	ND(0.010) J	

## PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1 1/2 MILE REACH

Sample Delivery Group No.	Sample ID	Date Collected	Mladurix	Validation Leve⊪	<b>G</b> ualification	Солтурования	QA/QC Paira meiteir	Value	Control Limits	Qualified Result	Motes
WOCs.											
E0P538	2-88-14 (5 - 7)	5/23/2003	Soil	Tier II	Yes	1,2,4-Trichlorobenzene	MS/MSD RPD	25.0%	<23%	NID(0.38) J	
			1			2,4-Chnitrophenol	ICAL %RSD	31.5%	>30%	ND(1.9) J	
						4-Mimophenol	ICAL %RSD	42.3%	>30%	NID(1.9) J	
						4-Nimophenol	MS/MSD/RPD/	122.0%	<50%	NID(1.9) J	
		]				4-Nitaroguirrolline-1-oxide	CCAL %D	63.0%	<25%	NID(0.76) J	
		}				Acenaphthene	MS/MSD RPD	37.0%	<19%	NID(0.38) J	
						Benzidine	CCAL %D	31.8%	<25%	ND(0.76) J	
						Bienasyil Alkoohoil	CCAL %D	42.7%	<25%	ND(0.76) J	
						I-texachlorocyclopenhadiene	ICAL %RSD	34.7%	>30%	ND(0.38) J	
						Hexachlorophene	ICAL RRF	0.029	>0.05	ND(0.76) J	
	1					N-Nitroscedi-n-propylamire	MSD %R	42.0%	45.0% - 125.0%	ND(0.38) J	
						o.o.o-Triethylphosphorothicate	CCAL %D	26.7%	<25%	ND(0.38) J	1
						Finomannicke	CCAL %D	29.4%	<25%	ND(0.38) J	<b></b>
OP538	2-SB-15 (4 - 6)	5/23/2003	Soil		Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	>30%	ND(2.1) J	
						4-Nitrophenol	ICAL %RSD	42.3%	>30%	ND(2.1) J	
						4-Nitroquincline-1-colde	CCAL %D	63.0%	<25%	ND(0.77) J	1
						Benzidine	CCAL %D	31.8%	<25%	ND(0.84) J	
						Bienzyl Alcohol	CCAL %D	42.7%	<2.5%	ND(0.84) J	
						Hexachlorocyclopentadiene:	ICAL %RSD	34.7%	>3/0/36	ND(0.42) J	
			1			Hexachlorophene	ICAL RIFE	0.029	>0.05	ND(0.84) J	
						o,o,o-Triethylphosphonothioate	CCAL 36D	26.7%	<25%	ND(0.42) J	
						Pronamide	CCAL 36D	29.4%	<25%	NO(0.42) J	
0P538	2-SB-DUP-3 (4 - 6)	5/23/2003	Soil	Tier II	Yes	2,4-Dinitrophenol	ICAL %RSD	31.5%	> 310%	ND(2.4) J	2-SB-15
						4-Nitrophenol	ICAL %RSD	42.336	>30%	ND(2.4) J	
						4-Nitroquirroline-1-cxide	CCAL %D	63.0%	< 2:5%	ND(0 83) J	<u> </u>
						Benzidine	CCAL 36D	31.836	<25%	ND(0 94) J	
	i		ľ			Benzyl Alcohol	CCAL 36D	42.7%	< 2:5%	ND((0.94)-J	
						Hexachiorocyclopentadiene:	ICAL %RSD	34.736	> 310%	ND((0.47)-J	
						Hexachlorophene	ICAL FIRE	0.029	>0.05	ND(0.94) J	
						o,o,o-Triethy/phosphorothioate	CCAL %D	26.7%	< 25%	ND(0.47) J	
						Pronamide	CCAL %D	29.4%	<: 2.151%	ND(0.47) J	
OP538	RB-052303-1	5/23/2003	Water	Tier II	Yes	2,4-Dinthophenol	ICAL %RSD	31.5%	> 310%	ND(0.050) J	
						4-Nitropheriol	ICAL %RSD	42.396	> 3101%	ND(0.050) J	
						4-Nitroquinoline-1-ocide	CCAL %D	63.0%	<: 205%	ND(0.010) J	
						Benzidine	CCAL %D	31.8%	<: 2:15:196	ND(0.020) J	
						Benzyl Alcohol	CCAL %D	42.7%	< 25%	ND(0.020) J	
						Histoacinilorocyclopismadiene	ICAL %RSD	34.736	>:340%	ND(0.010) J	
						F-lie scaedalorophyenne-	ICAL RRF	0.029	>:0 O5	ND(0.020) J	}
						o.o.o-Tirlethy/phosphonathiosite	CCAL %D	26.7%	<2:5%	ND(0.010) J	(n
					Pronamide	CCAL %D	29.4%	<2:5%	ND(0.010) J	**************************************	

## PRE-DESIGN INVESTIGATION/SOIL EVALUATION REPORT AND CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

Sample Delivery		Diarte:		Validation							
Group No.	(Stannigotte: HD)	Collected	Mautrioc	Loveil	Qualification	Сконппурконы гыс	CIA/CIC Parameter	Value	Control Limits	Qualified Result	Notes
PODDS/PODE	¹ 5										***************************************
3E0P538	2-SB-14 (5 - 7)	5/23/2003	Soil	Tiest III	No						
3E0P538	2-SB-15 (4 - 6)	5/23/2003	Soil	1fixen III	No						
3E0P538	2-SB-DUP-3 (4 - 6)	5/23/2003	Soil	Tiest III	No						2-SB-15
3E0P538	RB-052303-1	5/23/2003	vVarter	Ties: II	No						42-1-14-14-14-14-14-14-14-14-14-14-14-14-1
Sulfide and C	ya nikila										f=====================================
3E0P538	2-SB-14 (5 - 7)	5/23/2003	Soil	Tier II	No						
3E0P538	2-SB-15 (4 - 6)	5/23/2003		Tier II	No		1				
3E0P538	2-SB-DUP-3 (4 - 6)	5/23/2003	Soil	Tier II	No						2-SB-15
36:0P538	RB-052303-1	5/23/2003		Tier II	No						

Appendic D

PCB Spatial Average Evaluations



## PCB Spatial Average Evaluation

Parcel 18-4-6



#### TABLE D-1

### PARCEL 18-4-6 SPATIAL AVERAGE 0- TO 1-FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/POB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Sample ID(s)	Polygon 10	Pollygoin Area (ag. 11.)	Sample Depth Increment (ft.)	PCB Cont. (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (cumiulative) (cy)	PCB Conc. Times Total Volume
R55A000	44	399.76	0 - 0.5	0.44	0.4	7.40	2.96
RODAGOO	4544	388.70	0.5 - 1	ND(0.6)	0.3	7.40	2.22
R55A025	45	271.48	0 - 0.5	0.12[ND(0.5)]	0.185	5.03	0.93
Maamuza	491,3	271.40	0.5 - 1	ND(0.5)	0.25	5.03	1.26
R55A050	46	352.19	0 - 0.5	ND(0.6)	0.3	6.52	1.96
NOOMOOU	-10	Jule. 19	0.5 - 1	ND(0.5)	0.25	6.52	1.63
R55B000	47	427.48	0 - 0.5	0.3J	0.3	7.92	2.37
Naabbaaa	-7,	427.40	0.5 - 1	ND(0.11)[ND(0.5)]	0.1525	7.92	1.21
R55B050	48	441.59	0 - 0.5	ND(0.6)	0.3	B.18	2.45
INSTRUCTION OF THE PROPERTY OF	-70	441.00	0.5 - 1	ND(0.5)	0.25	B.118	2.04
R55B075	49	446.34	0 - 0.5	ND(0.7)	0.35	8.27	2.89
INDIGIONO O	-7.0	440.54	0.5 - 1	ND(0.6)	0.3	8.27	2.48
R55C050	50	253.81	0 - 0.5	ND(0.6)	0.3	4.70	1.41
RUUCUUU	30	4500.01	0.5 - 1	ND(0.5)	0.25	4.70	1.18
R55C075	51	212.40	0 - 0.5	ND(0.13)[ND(0.6)]	0.1825	3.93	0.72
1,000,0010	, , , , , , , , , , , , , , , , , , ,	12 1 127 0	0.5 - 1	ND(0.5)	0.25	3.93	0.98
R55C100 ⁸	52	283.39	0 - 0.5	ND(0.5)	0.25	10.50	2.62
R55C000	53	155.77	0 - 0.5	ND(0.6)	0.3	2.88	0.87
PUDGGGG	00	Figure 1 1	0.5 - 1	0.2J	0.2	2:88	0.58
R55C025	54	70.68	0 - 0.5	ND(0.6)	0.3	1.31	0.39
	04	70.00	0.5 - 1	ND(0.5)	0.25	1.31	0.33
18-4-6-1 [#]	55	8.77	0 - 0.5	ND(0.1)	0.05	0.32	0.02
R55A000	66	20.38	0 - 0.5	0.4J	0.4	0.38	0.15
rioonioou	00	20.30	0.5 - 1	ND(0.6)	0.3	0.38	0.11
R55A025	67	17.68	0 - 0.5	0.12[ND(0.5))]	0.185	0.33	0.06
P(00)*(020	01	17.00	0.5 - 1	ND(0.5)	0∷25	0.33	0.08
R55B000	68	39.61	0 - 0.5	0.34	0.3	0.73	0.22
riggiagood	00	38.01	0.5 - 1	ND(0.11)[ND(0.5)]	0.1525	0.73	0.11
R55C025	69	104.95	0 - 0.5	ND(0.6)	0.3	1.94	0.58
	02.	10%.50	0.5 - 1	ND(0.5)	0.25	1.94	0.49
Totals:		3506.28				129.86	35.30
	1			-4		Volume Weighted Average:	0.27

#### Notes:

- 1 NID(0.6) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations.
- 2. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for clarity.
- 3 # Indicates that the existing sample depth increment was extended to coincide with the depth interval being availabled. For example, existing data from the 0 0.5 foot depth increment was evaluated as a 0 1 foot depth increment for purposes of this spatial average evaluation.
- 4 Refer to Figure 0-1 for the locations of the Polygon ID and corresponding Sample ID(s)

### TABLE D-2

## PARCEL 18-4-6 SPATIAL AVERAGE 1- TO X- (1 TO 2) FOOT DEPTH INTERVAL

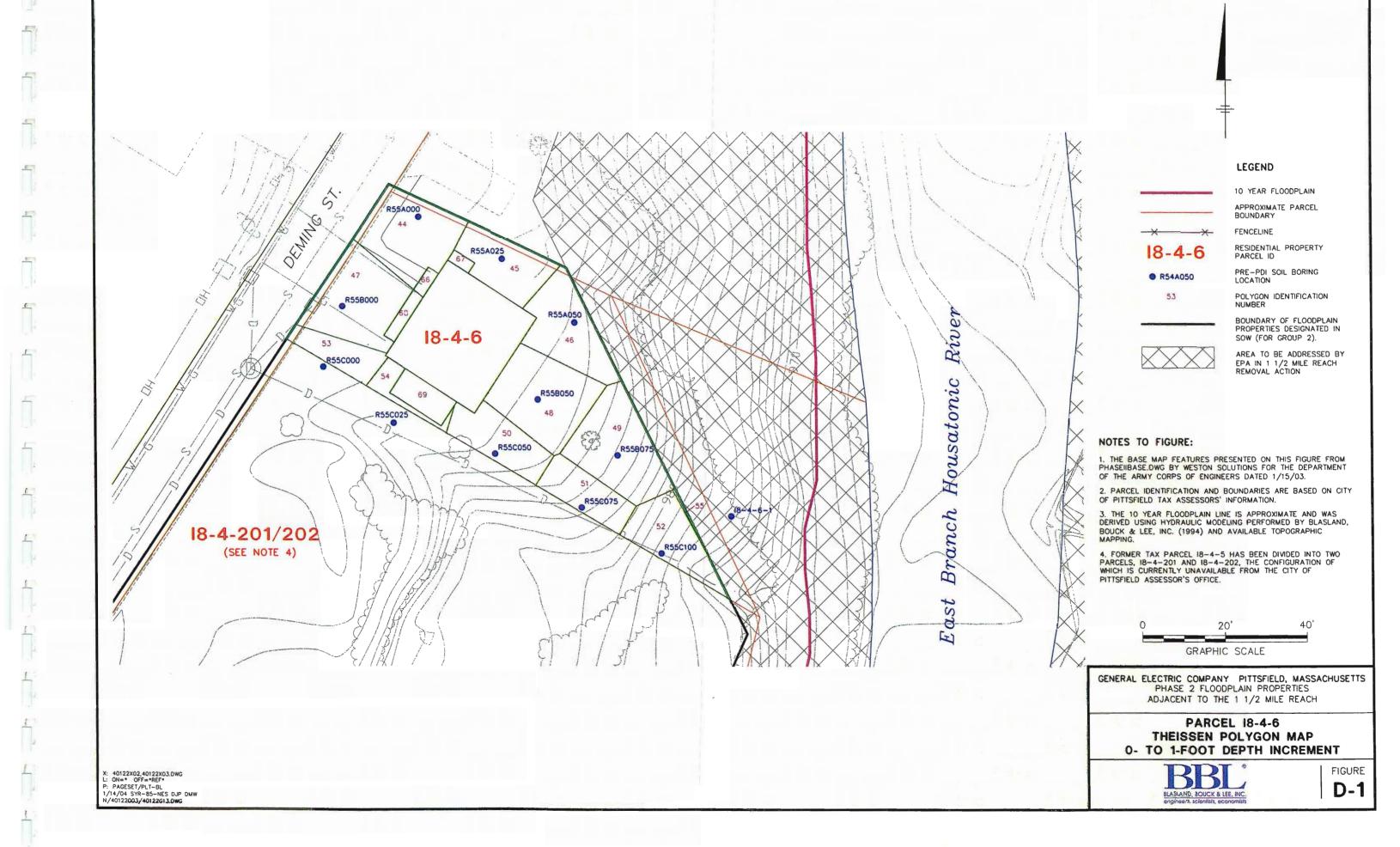
## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

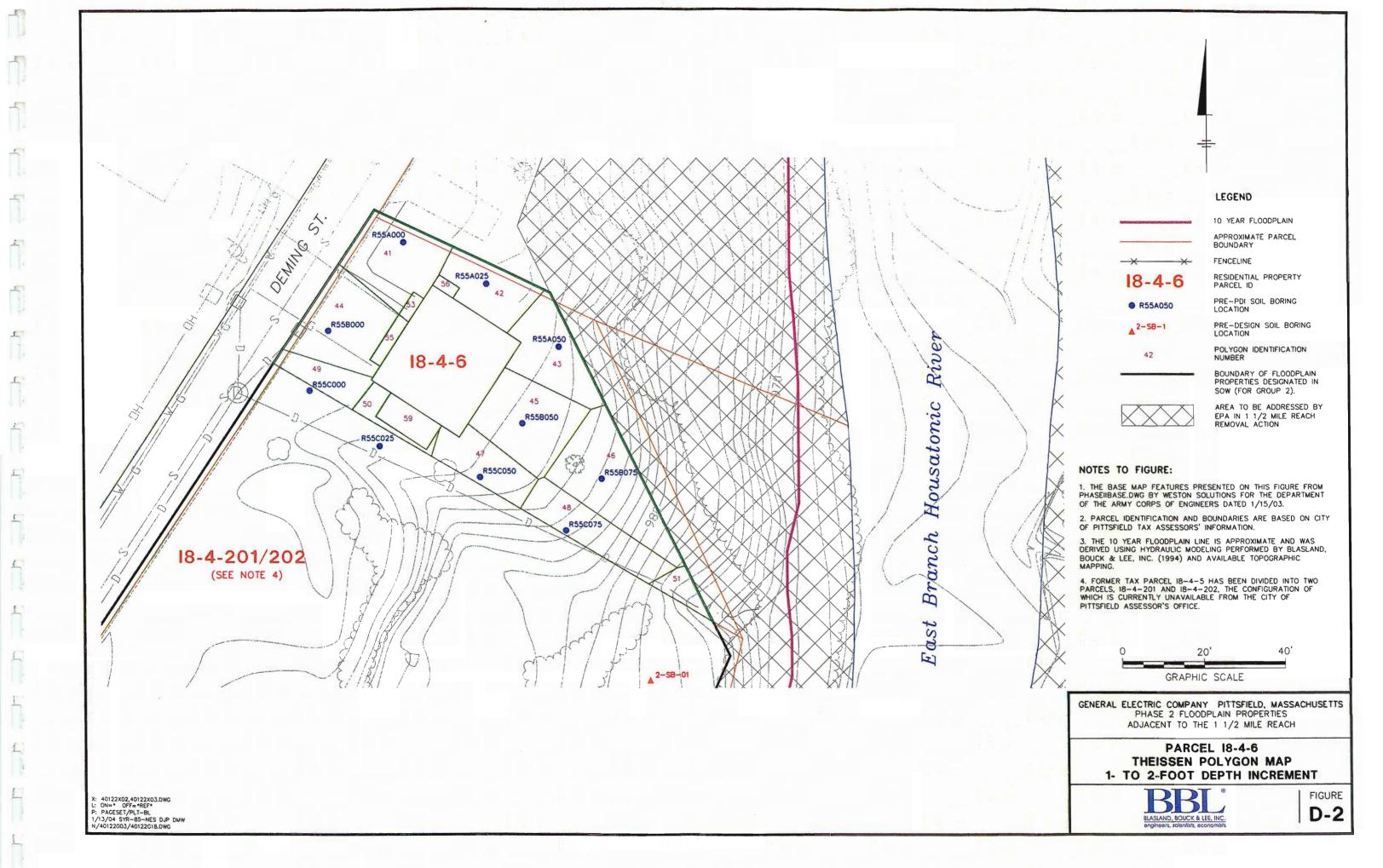
### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Sample ID(s)	Polygon 10	Połygom "Area (sq. ft.)	Sample Depth Increment (ft.)	PCB Gooc. (ppm)	Yotal PCBs (ppm) for Spatial Avg		PCB Come. Times Total Volume
R55A000	41	399.76	1 - 1.5	ND(0.5)	0.25	7.40	1.85
	-, '		1.5 - 2	ND(0.6)	0.3	7.40	2.22
R55A025	42	271.48	1 - 1.5	ND(0.6)	0.3	5.03	1.51
	,		1.5 - 2	ND(0.7)	0.35	5.03	1.76
R55A050	43	352.19	1 - 1.5	ND(0.6)	0.3	6.52	1.96
			1.5 - 2	ND(0.5)	0.25	6.52	1.63
R55B000	44	427.48	1 - 1.5	ND(0.5)	0.25	7.92	1.98
			1.5 - 2	ND((0.5)	0.25	7.92	1.98
R55B050	45	441.59	1 - 1.5	ND(0.6)	0.3	8.18	2.45
			1.5 - 2	ND((0.7)	0.35	8.18	2.86
R55B075	4-6	539.93	1 - 1.5	NID(0.11)[NID(0.5)]	0.1525	10.00	1.52
			1.5 - 2	0.2J	0.2	10.00	2.00
R55C050	4.7	253.81	1 - 1.5	NID(0.6)	0.3	4.70	1.41
			1.5 - 2	NID(0.7)	0.35	4.70	1.65
R55C075	4-8	328.26	1 - 1.5	NID(0.5)	0.25	6.08	1.52
			1.5 - 2	0.3J	0.3	80.8	1.82
R55C000	49	155.77	1 - 1.5	NID(0.5)	0.25	2.88	0.72
			1.5 - 2	NID(0.5)	0.25	2.88	0.72
R55C025	50	70.68	1 - 1.5	NID(0.5)	0.25	1.31	0.33
			1.5 - 2	ND(0.1)[ND(0.5)]	0.15	1.31	0.20
2-SB-1 ⁱⁿ	51	82.72	1 - 2	5.4	5.4	3.06	16.54
R55A000	53	20.38	1 - 1.5	ND(0.5)	0.25	0.38	0.09
			1.5 - 2	ND(0.6)	0.3	0.38	0.11
R558000	5.5	39.61	1 - 1.5	ND(0.5)	0.25	0.73	0.18
	15.5		1.5 - 2	ND(0.5)	0.25	0.73	0.18
R55A025	56	17.68	1 - 1.5	NO(0.6)	0.3	0.33	0.10
1 113131-11316-127	,5110	11.00	1.5 - 2	NO(0.7)	0.35	0.33	0.11
R55C025	59	104.91	1 - 1.5	NO(0.5)	0.25	1.94	0.49
140000020	0.5		1.5 - 2	ND(0.1)[ND(0.5)]	0.15	1.94	0.29
Totals:		35/06.25	***			129.86	50.20
						Volume Weighted Average:	0.39

#### Notes

- 1 ND(0.6) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations.
- 2. Alt calculations and rounding are performed by the computer software. Therefore, centain quantities in the above table are displayed as rounded numbers for clarity.
- 3 ## The existing sample depth increment for this location is 1 to 3 feet
- 4. Refer to Figure D-2 for the locations of the Polygon ID and corresponding Sample ID(s).





## PCB Spatial Average Evaluation

Parcels 18-4-201/202



### TABLE D-3

### PARCELS 18:4201/202 SPATIAL AVERAGE 0- TO 1-FOOT DEPTH INTERVAL

PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

			, The second of		.imalikasiin	y = y, <del>asos</del>	
18-4-5-1	88	333.47	0 - 0.5 0.5 - 1	0.48	0.48 0.63	6.18 6.18	2.96 3.89
	- <b> </b>	-}	0 - 0.5	0.102[0.274]		4_87	0.92
18-4-5-10	89	263.12	0.5 - 1	ND(0.1)	0.188 0.05	4.87	0.24
	- <del> </del>		0 - 05	ND(0.1)	0.05	4.4()	0.22
18-4-5-11	90	237.47	0 - <b>0.</b> 5 0.5 - 1	ND(0.1)	0.05	4.40	0.22
143 4 25 4.51	-	054.04	0 - 0.5	0.498	0.498	4.66	2.32
18-4-5-12	91	251.64	0.5 - 1	2.19	2.19	4.66	10.21
184-5-2	2 92	185.86	0 - 0.5	0.13	0.13	3.44	0.45
10902	92	100.00	0 - 0.5 0.5 - 1	0.61	0.61	3.44	2.10
18-4-5-3	93	1569.78	0 - 0.5	0.19	0.19	29.07	5.52
10+H+-O+-3	93	1908-7-0	0.5 - 1	0.28	0.28	29.07	8.14
184-54	94	188.26	0 - 0.5	11.4[12.7]	12.05	3.49	42.01
**************************************		100.20	0.5 - 1	10.7	10.7	3,49	37.30
184-5-5	5 95	228.24	0 - 0.5 0.5 - 1	0.343	0.343	4.23	1.45
				0.266	0.266	4.23	1.12
18-4-5-6	96	292.85	0 - 0.5	6.62[6.7]	5.66	5.42 5.42	36.12
			0.5 - 1	0.909	0.909		4.93
18-4-5-7	97	188.34	0 - 0.5	3.08	3.08	3.49	10.74
			0.5 - 1	7.55	7.55	3.49	26.33
18-4-5-8	98	168.08	0 - 0.5	11.3(17.7)	14.5	3.11	45.13
			0.5 - 1	1.37 1.59	1.37	3.11	4.26
18-4-5-9	99	181.34	0 + 0.5 0.5 + 1	1.59	1.59	3.36	5.34
	-}		0.5 - 1	5.28 ND(0.6)	5.28	3,36 12,77	17.73 3.83
R55C000	100	689.81	************************************	POLYTURO)	0.3		
			0.5 - 1 0 - 0.5	0.2J NID(0.6)	0.2 0.3	12,77 13,71	2.55
R55C025	101	740.18	0.5 - 1		0.25	13.71	4,11 3,43
2-SS-9	102	1688.95	0 - 1	ND(0.5) 0.032J	0.032	62.55	2000
2-SS-5	103	2803.60	0 - 1	0.036J	0.036	103,84	3.74
2-SS-1	104	3008.25	0 - 1	0.51	0.51	111.42	56.82
2-SB-3	105	376.31	0 - 1	6.1	6.1	13.94	85.02
2-SB-1	106	600.51	0 - 1	1.19	1.19	22.24	26.47
2-55-2	107	915.12	0 - 1	0.040J	0.04	33.89	1 36
2-SB-2	108	1023.80	() - 1	0.060J	0.06	33.89 37.92	2.28
2-S-S-6	109	1060.42	0 - 1	0.144	0.144	39.27	5.66
2-8-8-4	110	536.33	0 - 1	0.43	0.43	19,86	8.54
2-SB-5	111	283.23	0 - 1	2.33	2.33	10,49	24.44
2-S-S-10	112	587.54	0 - 1	0.12	0.12	21.76	2.61

### PARCELS 18-4-201/202 SPATIAL AVERAGE 0-TO 1-FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

·		T THE				i grapa <del>rar</del> a							
2-SB-4	113	7:24.64	0 - 1	(2),,414	0.44	26.84	11.81						
2-88-11	114	579.24	0 - 1	00212	0.212	21.45	4.55						
2-SB-6	115	679.21	0 - 1	0.49	0.49	25.16	12.33						
2-85-3	116	182.21	0 - 1	1.2	1.2	6.75	8.10						
2-SS-7	117	210.85	0 - 1	4.0[3.2]	3.6	7.81	28.11						
2-55-8	118	193.20	0 - 1	35	35	7.16	250.4						
2-SS-12	119	19.37	0 - 1	50	50	0.72	35.86						
	120	42.20	0 - 0.5	9.5	9.5	0.23	2.16						
10-4-7-10	1.20	12.28	0.5 - 1	244	244	0.23	55.51						
18-4-7-22	4/04	4.91	0 - 0.5	7.87	7.87	0.09	0.72						
10-4-7-2242	121	1.2.1	1.21	1.61	*4145   1.61 l	444   1461	1.21	4.91	0.5 - 1	13	7.87 13	0.09	1.18
2-SB-16	122	26.84	0 - 1	0.097[0.2.J]	2	0.99	1.99						
	400	1	0 - 0.5	0.097[0.27]	2 0.1485	0.93	0.14						
R93A125	123	50.40	0.5 - 1	ND(0.5)	0.25	0.93	0.23						
R93A100	124	69.60	0 - 0.5	0.7.1	0.7	1.29	0.90						
Indiana Foru	1.2,4	09.00	0.5 - 1	0.5J	0.5	1.29	0.64						
R93A075	125	0.05.70	0 - 0.5	ND(0.5)	0.25	4.92	1.23						
POSIGNAU FO	123	265.78	0.5 - 1	ND(0.5)	0.25	4.92	1.42:3						
R93A050	126	466.38	0 - 0.5	ND(0.5)	0.25	8.64	2.16						
IEACSPONEA (TACHO)	120	400.30	0.5 - 1	N(O(O)6)	0.3	8.64	2.59						
R93A025	127	90.75	0 - 0.5	NO(0.5)	0.25	1.68	0.42						
LEVISHONAN OFFICE	1.2.1	90.75	0.5 - 1	ND(0.5) ND(0.5)	0.25	1.68	0.42						
R93A000	128	100.51	0 + 0.5	NID(0.5)	0.25	8.38	2.10						
POSIGNAMIANO	128	452.54	0.5 - 1	NID(0.6)	0.3	8.38	2.51						
R55C050	129	E00 E7	0 - 0.5	ND(0.6)	0.3	10.53	3.16						
	129	568.57	0.5 - 1	NO(0.5)	0.25	10.53	2.63						
R55C075	430	200.00	0 - 0.5	NID(0.13)ND(0.6)	0.1825	5.68	1.04						
rabacura	130	306.80	0.5 - 1	NID(0.5)	0.25	5.68	1.42						
R55C100 [®]	131	284.46	0 - 1	NID(0.5)	0.25	1 0. 54	2.63						
Totals:		23590.54		***	***	873.72	940.7						
,	*h	********************											

#### Notes:

- 1. ND(0 €) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations.
- 2. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for durity.
- 3. # Indicates that the existing sample depth increment was extended to coincide with the depth interval being evaluated. For example, existing data from the 1 1.5 foot depth increment was evaluated as a 1 2 foot depth increment for purposes of this spatial average evaluation.
- 4. Refer to Figure D-3 for the locations of the Polygon ID and corresponding Sample ID(s).

#### PARCELS 18:4-201/202 SPATIAL AVERAGE 1- TO X- (1 TO 7) FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 1- TO 2-FOOT DEPTH INCREMENT

	ر. در در د						
**************************************	Mannet Dalma		1 - 1.5	2.43	ppm) for Spatial Avg. 2.43	PRECHASERANG PRANCONSTRASTRATICON PROGRESHAR HARRISHER HARRISHER SARKA 13. (SAC)	20.66
18-4-5-12	50	459.12	1.5 - 2	0.413	0.413	8.50	3.51
18454	51	205.88	1 - 1.5	0.281	0.281	3.81	1.07
10-44-0-4	91	200.00	1.5 - 2	22.1	22.1	3.81	84.26
18-4-5-6	52	369.73	1 - 2	0.292	0.292	13.69	4.00
18-4-5-7	53	254.50	1 - 1.5	6.26	6.26	4.71	2:9.50
18-45-7	53	234.3U F	1.5 - 2	0.787	0.787	4.71	3.71
18-4-5-8	54	271.59	1 - 1.5	0.148	0.148	5.03	0.74
104 DCi	54	4.7 1.00	1.5 - 2	0.258 0.773 0.512	0.258	5.03	1.30
18-4-5-9	55	253.01	1 - 1.5 1.5 - 2	0.773	0.773	4.69	3.62
10-40-9	35	200.01	1.5 - 2	0.512	0.512	4.69	2.40
R55C000	56	1589.73	1 - 1.5	NID(0.5)	0.25	29.44	7.36
Productor Charge	30	1303.73	1.5 - 2	NID((0.5)	0.25	29.44	7.36
R55C025	57	2223.29	1 - 1.5	NID((0.5)	0.25 0.45	41.17	10.29
			1.5 + 2	ND(0.1)((ND(0.5))		41.17	6.18
2-SB-3	58	1405.89	1 - 2	0.18	0.18	52.07	9.37
2-\$8-1	59	1431.89	1 - 2	5.4	5.4	53.03	286.38
2-SB-2	60	2853.35	1 - 2	0.39	0.39	105.68	41.21
2-SB-5	61	861.09	1 . 7	2.28[1.79]	2.035	31.89	64.90
2-SB-4	62	3950.89	1 - 2	0.10	().1	146.33	14.63
18-4-7-16	63	17.90	1 - 1.5	5.08	5.08	0.33	1.68
	.,,,,		1.5 - 2	1.47[1.81]	1.64	0.33	0.54
18-4-7-15	64	12.28	1 - 1.5	11.4	11.4	0.23	2.59
			1.5 - 2	3.92	3.92	0.23	0.89
18-4-7-22	65	4.91	1 - 1.5	65.6	65.6	0.09	5.96
			1.5 - 2	42.2	42.2	0.09	3.84
2-SB-16	66	26.84	1 - 2	0.219	0.219	0.99	0.22
R93A125	67	50.40	1 - 1.5	NID((0.5)	0.25	0.93	0.23
			1.5 - 2	ND(0.5)	0.25	0.93	0.23
R93A100	68	69.53	1 - 1.5 1.5 - 2	NID(0,7)	0.35	1.29	0.45
				ND(0.6)	0.3	1.29	0.39
R93A075	69	265.75	1 - 1.5	NID(0.5)	0.25	4.92	1.23
		<u> </u>	1,5 - 2	ND(0.6)	0.3 0.068	4,92 47.82	1,48
2-SB-6	69A	1291.09	1 - 2	0.068J	0.068	47.82	3.25

#### PARCELS.IR-4-201/202 SPATIAL AVERAGE 1- TO X- (1 TO 7) FOOT DEPTH INTERVAL.

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 1- TO 2-POOT DEPTH INCREMENT (cont'd)

#				The second secon	in Lotal PCBC		
R93A050	7 ()	999.94	1 - 1.5	NO(0.8)	0.3	18.52	5.56
(400,4000	I	J/ 6/4/. 4/-4	1.5 - 2	ND(0.5)	0.25	18.52	4.63
R93/4025	71	1644.79	1 - 1.5	ND(0.5)	0.25	30.46	7.61
1733-34-4022-3	, ,	1044.73	1.5 - 2	ND(0.5)	0.25	30.46	7.61
R93A000	72	1665.16	1 - 1.5	ND(0.7)	0.35	30.84	10.79
170074000	7.2.	1005.10	1.5 - 2	MD(0.5)	0.25	30.84	7.71
R55C050	7.3	690.10	1 - 1.5	ND(0.6)	0/3	12.78	3.83
reserved	1.3	080.10	1,5 - 2	ND(0.7)	0.35	12.78	4.47
R55C075	7.4	7:21.67	1 - 1.5	ND(0.5)	0.25	13.36	3.34
	/ ···	1.61.01	1.5 - 2	0.3J	0.3	13.36	4.01
Totals:	***	23590.30			·*-	873.71	685.02

#### SPATIAL AVERAGE 2- TO 3-FOOT DEPTH INCREMENT

	28 28 28	459.12	116111141111611161116111611161116111611	0.6:2%)	0.629	1 7′.()()	10.70
18-4-5-4	29	625.51	2 - 2.5	1,34 ND(0,1)	1.34 0.05	11.58 11.58	15.52 0.58
18-4-5-7	30	326.31	2 - 2.5	5,04	5.04	6.04	30.46
2-58-3	31	1405.89	2.5 - 3 2 - 3	ND(0.1) 0.18	0.05 0.18	6.04 52.07	0.30 9.37
2-\$8-1	32	1791.60	2 - 3	5.4	5.4	66.36	358.32
2-SB-2	33	7433.80	2 - 3	0.39	0.39	275.33	107.38
2-\$6-5	34	995.15	2 - 3	2.28(1.79)	2.035	343.646	75.00
2-88-4	35	5696.06	2 - 3	0.1	0.1	210.97	21.10
2-SB-6	36	4554.86	2 - 3	0.068J	0.068	168.70	11.47
18-4-7-16	-,-,	41-2 47474	2 - 2.5	1.22	1.22	0.33	0.40
(O=40=1/=1] (0)	37	17.90	2.5 - 3	0.324	0.324	0.33	0.11
18-4-7-15	38	64.83	2 - 2.5	7.69	7.69	1.20	9.23
(O=4+1 + 1/2)	36	04.03	2.5 - 3	6.24	6.24	1.20	7.49

#### PARCELS 18-4-201/202 SPATIAL AVERAGE 1- YO X- (1 TO 7) FOOT DEPTH INTERVAL

### PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 2- TO 3-FOOT DEPTH INCREMENT (cont'o)

				The state of the s	Total PCEs 707 (ppm) for Spatial Avg		
18-4-7-22	39	148.70	2 - 2.5	700	700	2.75	1927,54
10-4-7-2.2.	33	1-4107-07	2.5 - 3	6.8	6.8	2.75	18.72
2-SB-16	40	69.76	2 - 3	0.219	0.219	2.58	0.57
18-4-2,3,4-6	41	1.06	2 - 2.5	10.4	10.4	0.02	0.20
1			2.5 - 3	4,64	4.64	0.02	0.09
Totals:		23590.54	***	·••		873.72	2604.56
'						i MalimalAnhibia (Asyragia)	

#### SPATIAL AVERAGE 3- TO 4-FOOT DEPTH INCREMENT

					The Total PCH of S	• Molume :: - Crimilatiyo • S	
2-SE-3	16	1700.98	3 - 4	1221211   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   12212   1221	0.0225	63.00	1.42
2-SB-1	17	1791.60	3 - 4	0.44	1,44	66.36	95.55
2-SB-2	18	7433.80	3 - 4	0.16	1.16	275.33	319.38
2-SB-5	19	1714.01	3 - 4	ND(0.046)	0.023	63.48	1.46
2-SB-4	20	5697.96	3 - 4	ND(0.039)	0.0195	211.04	4.12
2-SE-6	21	4634.44	3 - 4	0.032J	0.032	171.65	5.49
2-SE-16	22	361.52	3 - 4	0.027J	0.027	13.39	0.36
18-4-2,3,4-6	23	256.23	3 - 3.5	8.2	8.2	4.74	38.91
102-4-21-01-4-0	1 ""	4.4343.16.43	3.5 - 4	1.3	1.3	4.74	6.17
Totals:		23590.54		4P#	***	873.72	466.69

#### SPATIAL AVERAGE 4- TO 5-FOOT DEPTH INCREMENT

A COMPANY OF A STATE OF THE STA	. <b>.</b>				A Company of the Comp			
	2-SB-3	18	1700.98	4 - 5	NID((0.045)	0.0225	63.00	1.42
	2-SB-1	19	1791.60	4 - 5	0.44	(),44	66.36	29.20
	2-SB-2	20	7433.80	4 - 5	0.16	0.16	275.33	44.05
- 1	2-SB-5	21	1714.01	4 - 5	NID(0.046)	0.023	63.48	1.46

#### PARCENS IR-4-201/202 SPATIAL AVERAGE 1- TO X- (1 TO 7) FOOT DEPTH INTERVAL

PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 4- TO 5-FOOT DEPTH INCREMENT (contd)

					Copies volumente de la companya de l La copiesa de la companya de la comp	7 (1977) - 1977 (1977) - 1977 (1977)	
2-SBI-4	22	5697.96	4 - 5	ND(0.0@9)	0.0195	211.04	4.12
2-SB-6	23	4634.44	4 - 5	OF CREKEN)	0.032	171.65	5.49
2-SB-16	24	347.32	4 - 5	0.027.J	0.027	12.86	0.35
2-SE-15	25	20.41	4 - 5	0.032J	0.032	0.76	0.02
18-4-2,3,4-6	26	250.02	4 - 4.5	0.129	0.129	4.63	0.60
10*************************************	1		4.5 - 5	0.594	0.594	4.63	2.75
Totals:		23590.54				873.72	89.45
***************************************		***************************************			<u> </u>		

#### SPATIAL AMERAGE 5- TO 6-FOOT DEPTH INCREMENT

					Total/PCE4.ju (ppm) for Spatial/Awg		Agraydiga Laurenne Ton Volum
2-SB-1	6	2030.86	5 - 6	NID(0.064)	0.032	75.22	2.41
2-SB-2	7	16470.99	5 - 6	NiD((0.039))	0.0195	610.04	11.90
2-SB-15	8	5088.69	5 - 6	0.032J	0.032	188.47	6.03
Totals:		23590.54	100	198	4-1-	873.72	20.33
						***Moduming AAA pigibito disAssamagae: 3	

#### SPATIAL AVERAGE 6- TO 7-FOOT DEPTH INCREMENT

					(jaga jaga jaga jaga jaga jaga jaga jaga		Manigus Maria Kanggarangan Manigus Manigus br>Manigus Manigus br>Manigus Manigus Man
2-SB-1	6	2030.86	6 - 7	ND(0.064)	0.032	75.22	2.41
2-SB-2	7	16470.99	6 - 7	ND(0.039)	0.0195	610.04	11.90
2-SB-15 ^{##}	8	5088.69	6 - 7	0.053	0.053	188.47	9.99
Totals:		23590.54	***	***	40	873.72	24.29

#### OVERVALL SUMMARY: 1- TO 36-(1 TO 7) FOOT DEPTH INTERVAL

				Total Scille Ignifor Spatial Avgr		
Totals:	23590.54	n=-	441		5242.33	3890.35

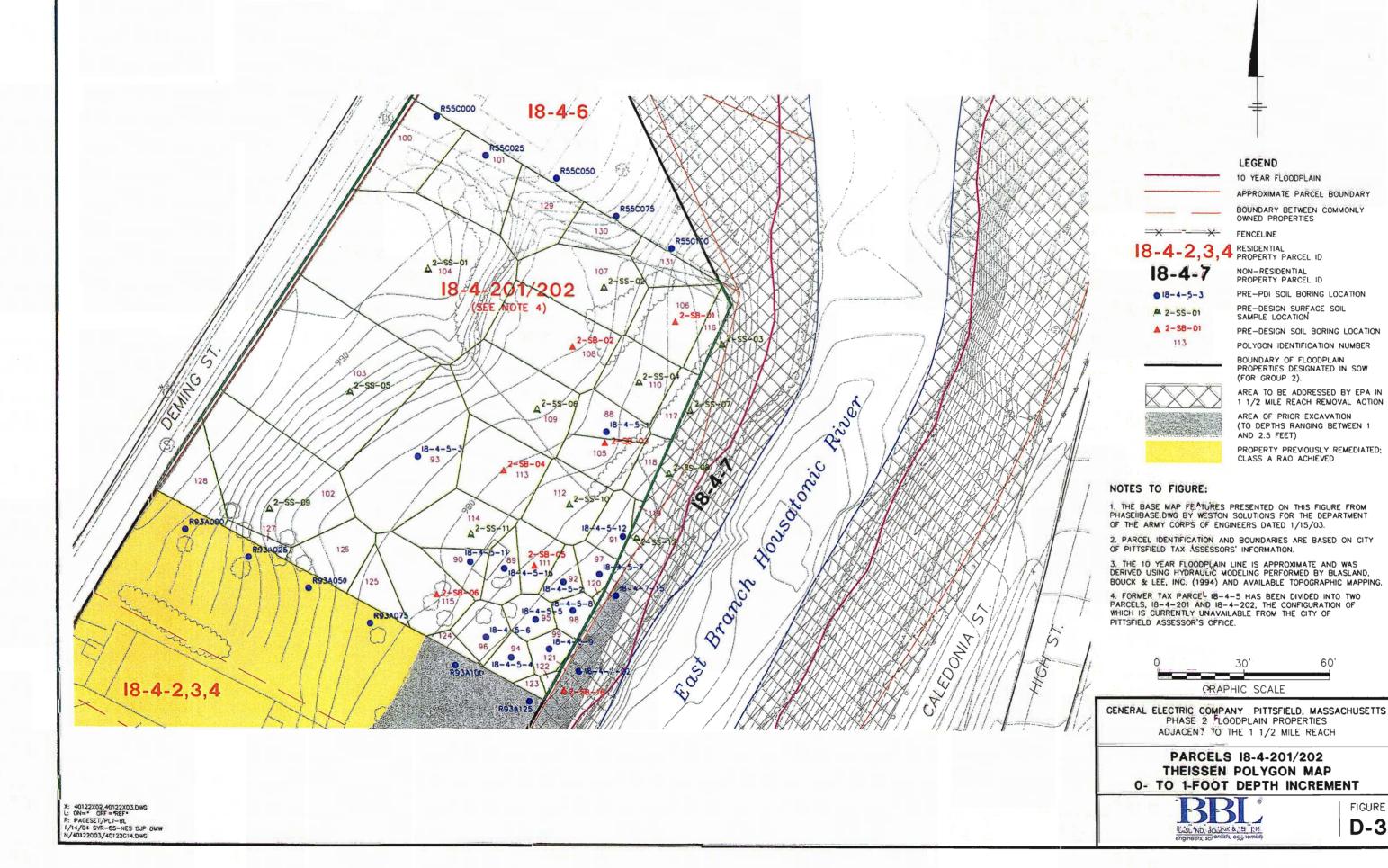
#### PARCELS IB-6-201/202 SPATIAL AVERAGE 1- TO X- (1 TO 7) FOOT DEPTH INTERVAL

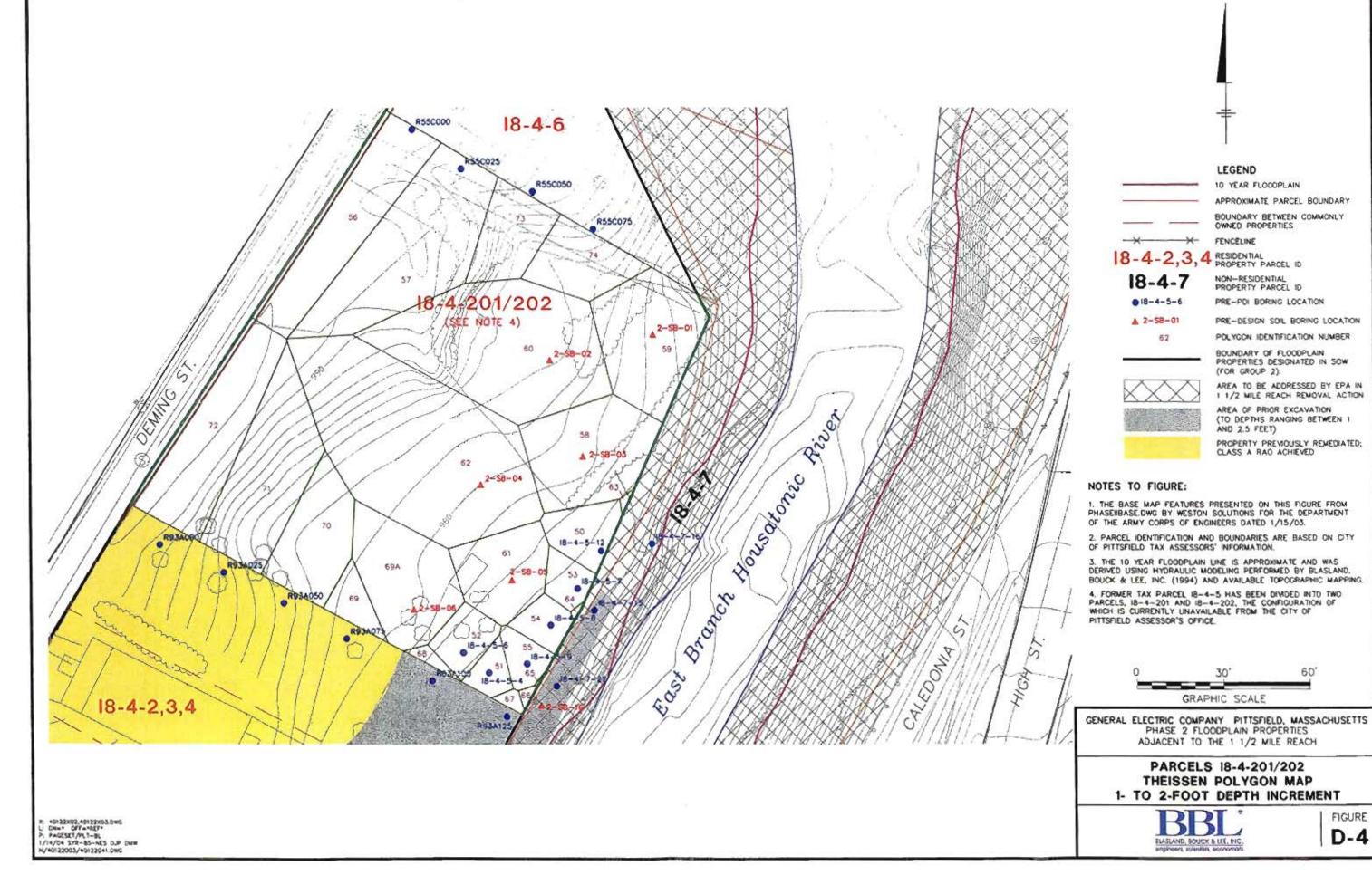
### PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

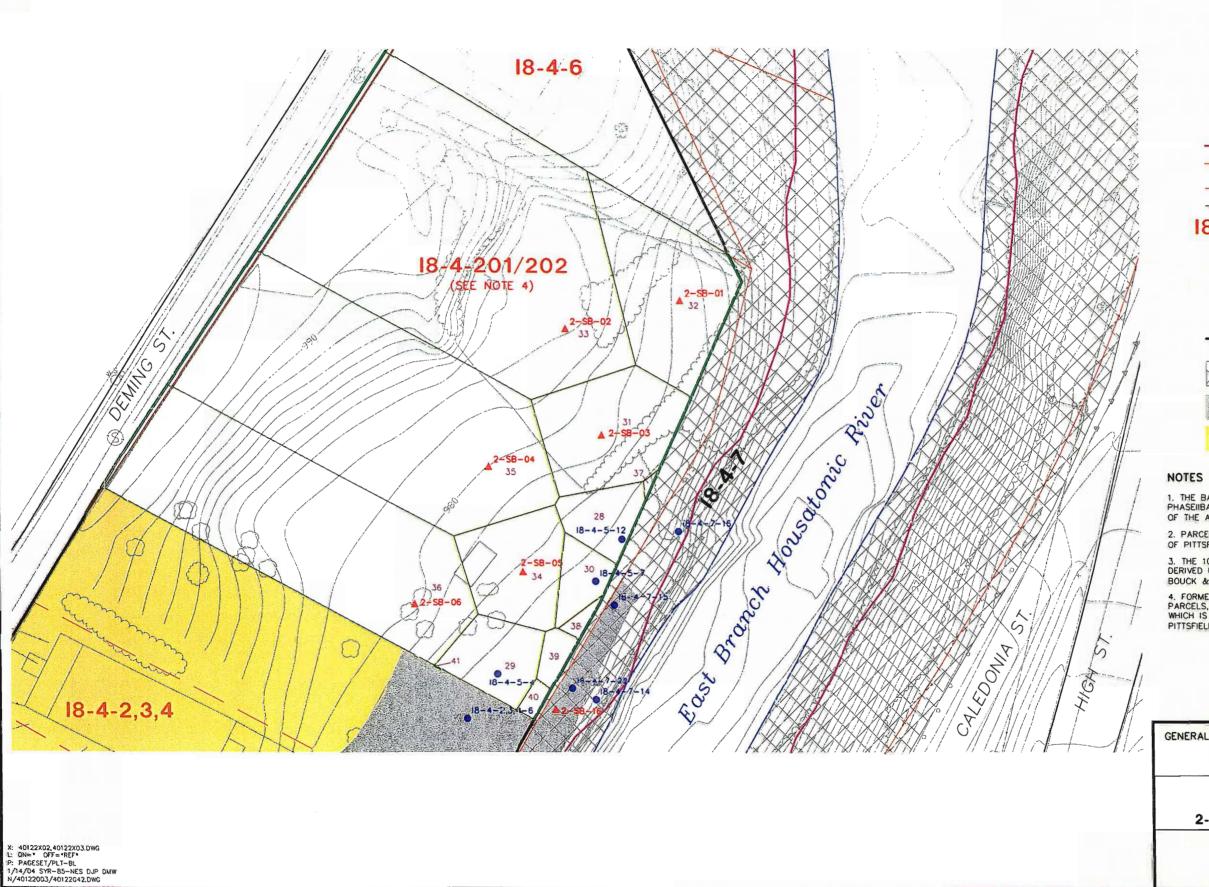
#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### Notes:

- 1. ND(0.6) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations.
- 2. All calculations and rounding are performed by the computer softwars. Therefore, partial quantities in the above table are displayed as rounded numbers for clarity.
- 3. # Indicates that the existing sample depth increment was extended to coincide with the depth interval being evaluated. For example, existing data from the 1 1.5 foot depth increment was evaluated as a 1 2 foot depth increment for purposes of this spatial average evaluation.
- 4. ## The existing sample depth increment for this location is 6 to 8 feet.
- 5 Refer to Figures D-4 (1- to 2-foot depth increment), D-5 (2- to 3-foot depth increment), D-6 (3- to 4-foot depth increment), Figure D-7 (4- to 5-foot depth increment), and Figure D-8 (5- to 7-foot depth increment) for the locations of the Potygon 4D and corresponding Sample ID(a).









10 YEAR FLOODPLAIN

APPROXIMATE PARCEL BOUNDARY

BOUNDARY BETWEEN COMMONLY
OWNED PROPERTIES

FENCELINE

8-4-2,3,4 RESIDENTIAL PROPERTY PARCEL ID

PROPERTY PARCE

10-4-1

NON-RESIDENTIAL PROPERTY PARCEL ID

● 18-4-5-4 ▲ 2-58-01 PRE-PDI SOIL BORING LOCATION

PRE-DESIGN SOIL BORING LOCATION

▲ 2-SB-01 32

POLYGON IDENTIFICATION NUMBER

BOUNDARY OF FLOODPLAIN
PROPERTIES DESIGNATED IN SOW
(FOR GROUP 2).

(FOR GROUP 2).

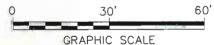
AREA TO BE ADDRESSED BY EPA IN
1 1/2 MILE REACH REMOVAL ACTION

AREA OF PRIOR EXCAVATION (TO DEPTHS RANGING BETWEEN 1 AND 2.5 FEET)

PROPERTY PREVIOUSLY REMEDIATED; CLASS A RAO ACHIEVED

#### NOTES TO FIGURE:

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.
- 4. FORMER TAX PARCEL 18-4-5 HAS BEEN DIVIDED INTO TWO PARCELS, 18-4-201 AND 18-4-202, THE CONFIGURATION OF WHICH IS CURRENTLY UNAVAILABLE FROM THE CITY OF PITTSFIELD ASSESSOR'S OFFICE.

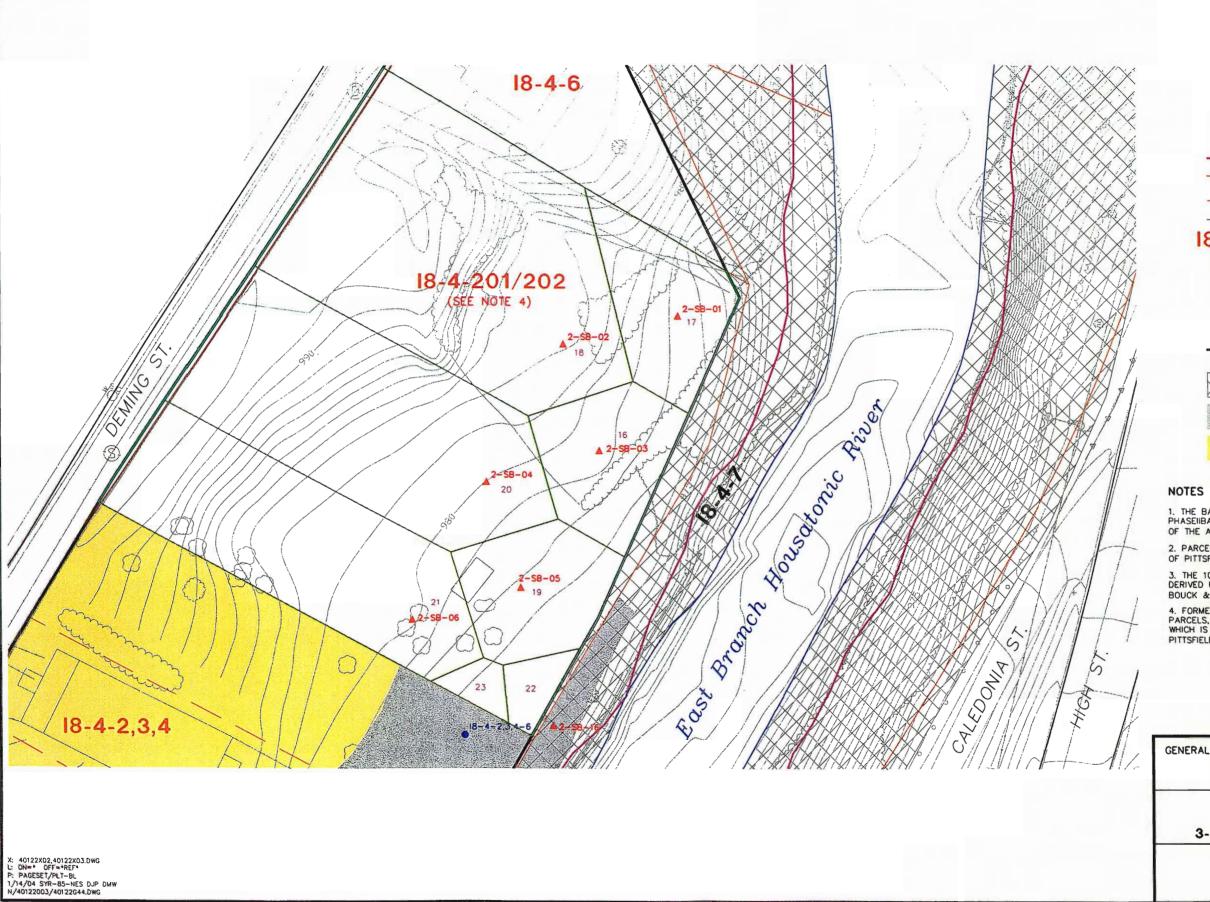


GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS
PHASE 2 FLOODPLAIN PROPERTIES
ADJACENT TO THE 1 1/2 MILE REACH

PARCELS 18-4-201/202 THEISSEN POLYGON MAP 2- TO 3-FOOT DEPTH INCREMENT



FIGURE D-5





10 YEAR FLOODPLAIN

APPROXIMATE PARCEL BOUNDARY

BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES

FENCELINE

18-4-2,3,4 RESIDENTIAL PROPERTY PARCEL ID

18-4-7

NON-RESIDENTIAL PROPERTY PARCEL ID

● 18-4-2,3,4-6

PRE-PDI SOIL BORING LOCATION

▲ 2-SB-01

PRE-DESIGN SOIL BORING LOCATION

POLYGON IDENTIFICATION NUMBER

BOUNDARY OF FLOODPLAIN PROPERTIES DESIGNATED IN SOW (FOR GROUP 2).

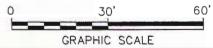
AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL ACTION

AREA OF PRIOR EXCAVATION (TO DEPTHS RANGING BETWEEN 1 AND 2.5 FEET)

PROPERTY PREVIOUSLY REMEDIATED; CLASS A RAO ACHIEVED

#### NOTES TO FIGURE:

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.
- 4. FORMER TAX PARCEL 18-4-5 HAS BEEN DIVIDED INTO TWO PARCELS, 18-4-201 AND 18-4-202, THE CONFIGURATION OF WHICH IS CURRENTLY UNAVAILABLE FROM THE CITY OF PITTSFIELD ASSESSOR'S OFFICE.

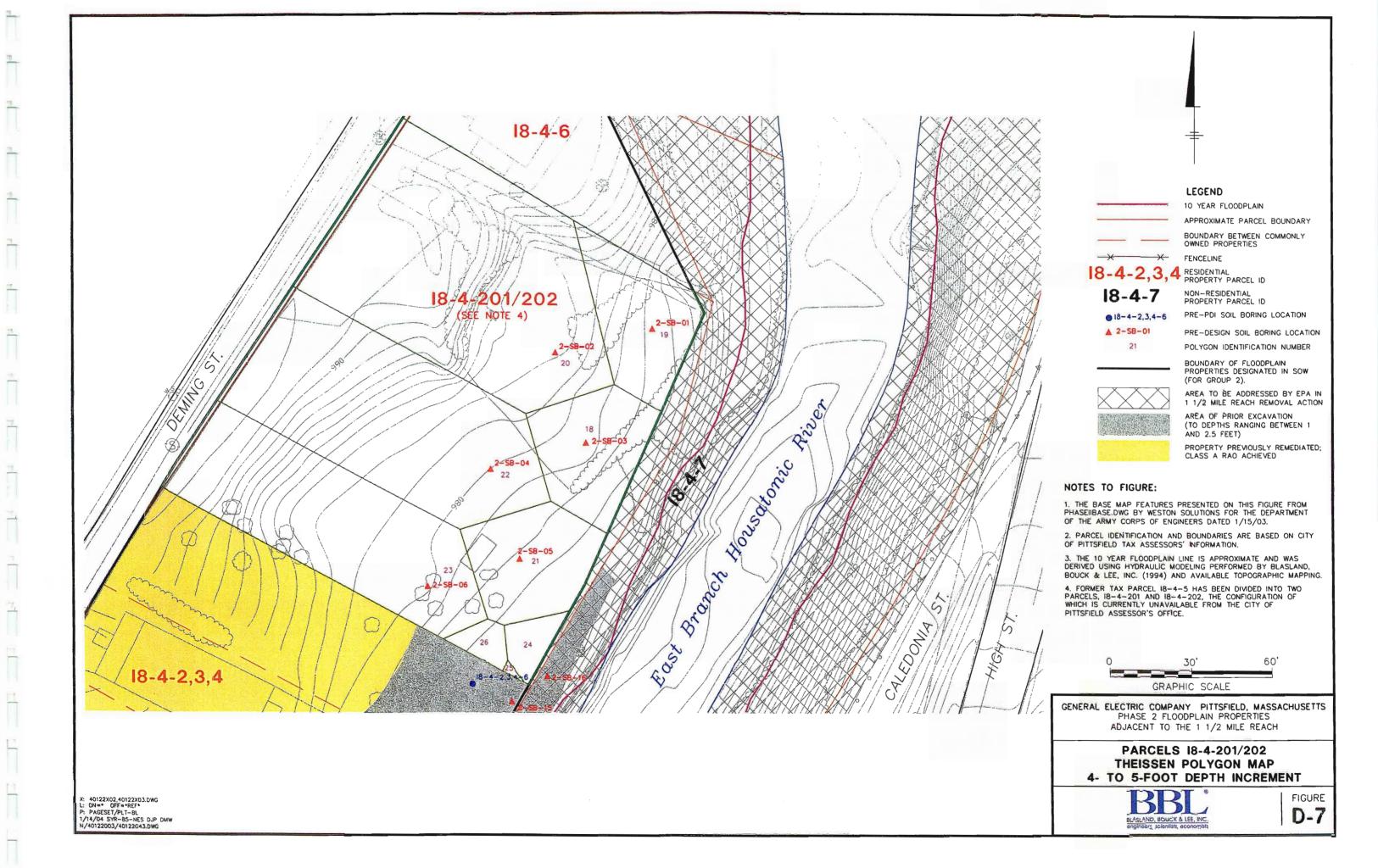


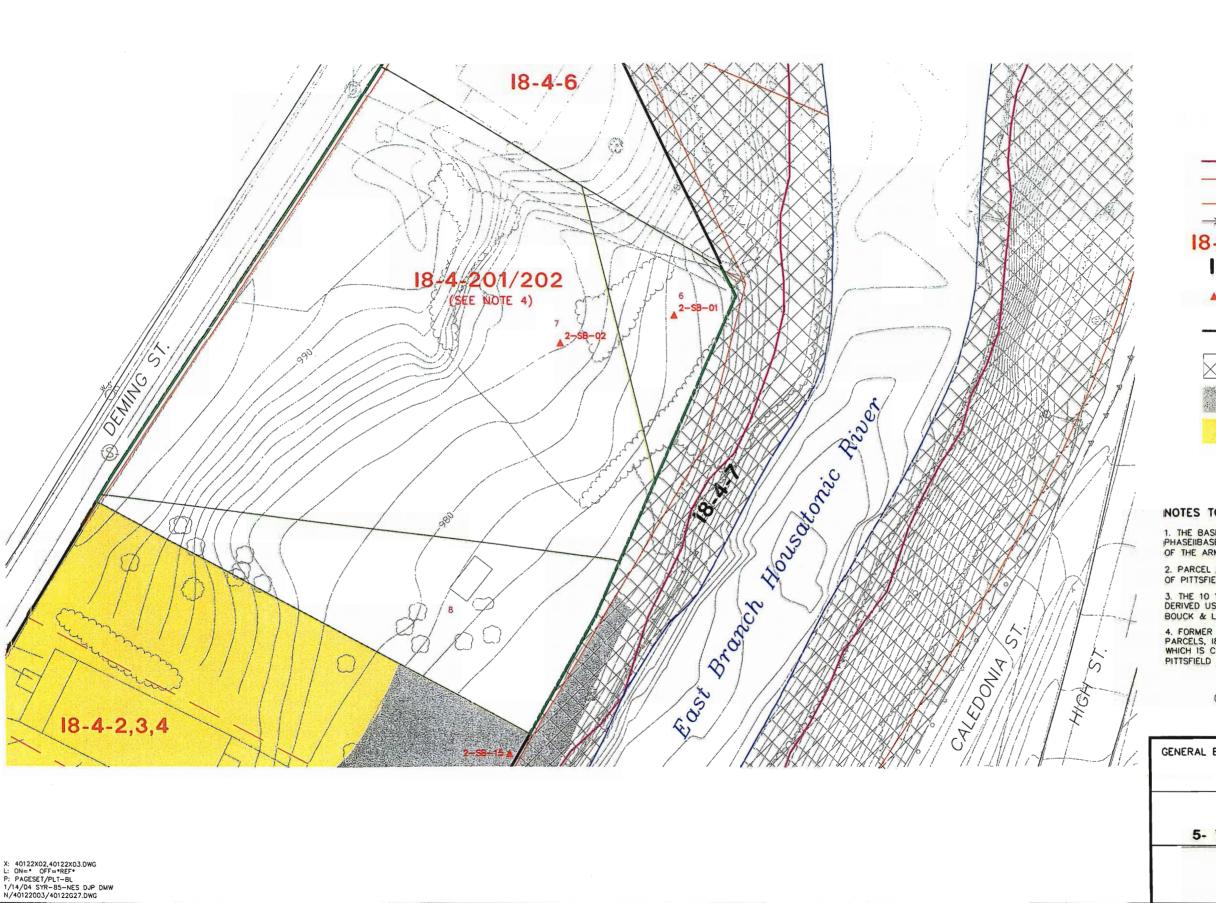
GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS
PHASE 2 FLOODPLAIN PROPERTIES
ADJACENT TO THE 1 1/2 MILE REACH

PARCELS 18-4-201/202
THEISSEN POLYGON MAP
3- TO 4-FOOT DEPTH INCREMENT



FIGURE D-6





LEGEND

10 YEAR FLOODPLAIN

APPROXIMATE PARCEL BOUNDARY

BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES

FENCELINE

-4-2,3,4 RESIDENTIAL PROPERTY PARCEL ID

NON DECIDENTIAL

18-4-7

NON-RESIDENTIAL PROPERTY PARCEL ID

AND 2.5 FEET)

▲ 2-SB-01

PRE-DESIGN SOIL BORING LOCATION

POLYGON IDENTIFICATION NUMBER

BOUNDARY OF FLOODPLAIN PROPERTIES DESIGNATED IN SOW (FOR GROUP 2).

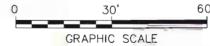
 $\times \times \times \rangle$ 

AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL ACTION AREA OF PRIOR EXCAVATION (TO DEPTHS RANGING BETWEEN 1

PROPERTY PREVIOUSLY REMEDIATED; CLASS A RAO ACHIEVED

#### NOTES TO FIGURE:

- 1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE FROM PHASEIBASE.DWG BY WESTON SOLUTIONS FOR THE DEPARTMENT OF THE ARMY CORPS OF ENGINEERS DATED 1/15/03.
- 2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
- 3. THE 10 YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.
- 4. FORMER TAX PARCEL 18-4-5 HAS BEEN DIVIDED INTO TWO PARCELS, 18-4-201 AND 18-4-202, THE CONFIGURATION OF WHICH IS CURRENTLY UNAVAILABLE FROM THE CITY OF PITTSFIELD ASSESSOR'S OFFICE.



GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS
PHASE 2 FLOODPLAIN PROPERTIES
ADJACENT TO THE 1 1/2 MILE REACH

PARCELS 18-4-201/202 THEISSEN POLYGON MAP 5- TO 7-FOOT DEPTH INCREMENT



FIGURE D-8

## PCB Spatial Average Evaluation

Parcel 18-4-7



#### PARCEL 18-4-7 SPATIAL AVERAGE 0-TO 1-FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PHITSFIELD, MASSACHUSETTS

Sample ID(s)	Polygon ID	Polygon Ama (ag. ft.)	Sample Dopth Increment (ft.)	PCB Cổiu. (phil)	Total PCBs (ppm) for Spatial Avg	Yolume (cumuktive) (cy)	Average PCB Conc. Times Total Volume
18-4-7-2	58	372.76	0 - 0.5	44)	0.021	6.90	0.14
			0.5 - 1		0.021	6.90	0.14
18-4-7-3	59	455.76	0 - 0.5		0.021	8.44	0.18
			0.5 - 1	*B 19	0.021	8.44	0.18
18-4-7-5	60	276.13	0 - 0.5	**************************************	0.021	5.11	0.11
			0.5 - 1 0 - 0.5		0.021	5.11 0.02	0.11
18-4-7-5	60A	1.24	0 - 0.5	667	0.021 667	0.02	0.00 15.36
		***************************************	0.5		0.021	5.15	0.11
18-4-7-20	61	278.11	0.5 - 1	·	0.021	5.15 5.15	0.11
			0 - 0.5	(#dr	0.021	3.03	0.06
18-4-7-19	6:2	163.74	0.5 - 1	(hd)	0.021	3.03	0.06
			0 - 0.5	(bd)	0.021	2.4-8	0.05
18-4-7-18	63	133.96	0.5 - 1	:Fd:	0.021	2.48	0.05
			0 - 0.5	gle de	0.021	O.CI4	0.00
18-4-7-8	(5)-4)	1.98	0.5 - 1	10 dr	0.021	0.04	0.00
13 04 0 0	,T. E.	400.04	0 - 0.5	1k dr	0.021	3.11	0.07
17-21-8-3	65	168.01	0.5 - 1	164:	0.021	3.11	0.07
 18-4-7-1	66	92.78	0 - 0.5	1 <b>b d</b> 1	0.021	1.72	0.04
10-4-7-1	GID	84.70	0.5 - 1	th di	0.0:21	1.72	Ov. Ck4
	67.67A	68.29	0 - 0.5	1641	0.021	1.206	0.03
Trans. Telephone	07,077	QQ.2-0	0.5 - 1	şle <b>d</b> e	0.021	1208	0.03
18-4-7-17	68,68A	29.22	0 - 0.5	strate	0.021	0.54	0.01
	55,00	45 L' . 6+4+	0.5 - 1	19.01	0.021	0.54	0.01
18-4-7-6	69.69A	10.30	0 - 0.5	1F di	0.021	0.19	0.00
	1 25,007		0.5 - 1	16.0	0.021	0.19	0.00
18-4-7-23	70.70A	9.92	0 - 0.5	11 d ·	0.021	0.18	0.00
			0.5 - 1	11 d	0.021	0.18	0.00
17-21-8-12	71	21.19	0 - 0.5		0.021	0.39	0.01
		· · · · · · · · · · · · · · · · · · ·	0.5 - 1	⊕#- 	0.021	0.39	0.01
17-21-8-9	72	11.04	0 - 0.5	η	0.021	0.20	0.00
	- <del> </del>  -		0.5 - 1	**************************************	0.021	0.20	0.00
17-21-8-7	73	2.52	0 - 0.5	17.8 17.8	0.021	0.05	0.00
			0.5 - 1	**************************************	0.021	0.05	0.00
17-21-8-4	74	8.22	0 - 0.5	11-8-	0.021	0.15	0.00
			0.5 - 1	4ra	0.021	0.15	0.00
R54D100	7.5	189.97	0 - 0.5	4rB	0.021	3.52	0.07
	.11		0.5 - 1		0.021	3.52	0.07

### PARCEL 18-4-7 SPATIAL AVERAGE 0- TO 1-FOOT DEPTH INTERVAL

### PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Sample ID (s)	Pollygon 10	Polygon Area (sq. ft.)	Sample Depth Increment (ft.)	PCB Conc. (ppna)	Total PCBs (ppm) for Spatial Avg	Volume (comulative) (cx)	Average PCB Conc. Times Total Volume
R54C100	76	132.34	0 - 0.5	4nb	0.021	2.45	0.05
	ļ		0.5 - 1	400	0.021	2.45	0.05
18-4-1-2	77	14.02	0 - 0.5 0.5 - 1		0.021	0.26	0.01
					0.021	0.26	0.01
R54B100	78	67.38	0 - 0.5	#1b	0.021	1.25	0.03
			0.5 - 1 0 - 0.5	A 19	0.021	1.25 5.31	0.03
R54A100	79	286.83			0.021		0.11
	ļļ		0.5 - 1		0.021	5.31	0.11
18-4-1-7	80	95.57	0 - 0.5		0.021	1.77	0.04
			0.5 - 1	214	214		378.75
18-4-1-7	80/4	52.85	0 - 0.5		0.021	0.98	0.02
			0.5 - 1		0.021	0.98	0.02
18-4-2,3,4-10	81	34.06	0 - 0.5		0.021	0.63	0.01
			0.5 - 1		0.021	0.63	0.01
18-4-2,3,4-10	81A	10.91	0 - 0.5 0.5 - 1	1,835	0.021 1,835	0.20	0.00
				1,033			370.70
R93D125	82	148.49	0 - 0.5	114	0.021	2.75 2.75	0.06
	{{		0.5 - 1 0 - 0.5		0.021		0.06
18-4-7-12	83	124.36		11 A		2.30	0.05
	<b></b>		0.5 - 1	44	0.021	2.30	0.05
18-4-7-21	84	58.38	0 - 0.5	11 ft	0.021	1.08	0.02
	ļ		0.5 - 1		0.021	1.08	0.02
18-4-2,3,4-1	85	7.35	0 - 0.5	17 A	0.021	0.14	0.00
	<b>{</b>		0.5 - 1	17 M	0.021	0.14	0.00
18-4-7-4	86	2.02	0 - 0.5	178 	0.021	0.04	0.00
	<b></b>	3329.69	0.5 - 1	,,,,	0.021	0.04	0.00
Totals:	I	3329.69	<u> </u>	****		·{uu	767.36
						Volumo Weighted Average:	6.22

#### Notes

- 1 NID(0.5) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations.
- 2. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for durity
- 3 "-Indicates soil was removed at this depth and clean backful was placed at these locations. The backful concentration corresponds to the average PCB concentration as presented in GE's Proposed CD Backful Data Set (March 11, 2003).
- 4. Refer to Figure D-9 for the locations of the Polygon ID and corresponding Sample ID(s).

#### PARCEL 18-4-7 SPATIAL AVERAGE 1- TO 3-FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 1- TO 2-FOOT DEPTH INCREMENT

Sample ID(a)	Polygon ID	Polygen Amer (sq. ft.)	Sample Depth Increment (ft.)	PCH Conc. (ppin)	Total PCBs (ppm) for Spatial Avg	Volume (camulative) (cy)	Average PCB Conc. Times Total Volume
18-4-7-2	54	372.76	1 - 1.5	10-d)	0.021	6.90	0.14
			1.5 - 2	1949:	0.021	6.90	0.14
18-4-7-3	55	455.76	1 - 1.5	174:	0.021	8.44	0.18
			1.5 - 2	114*	0.021	8.44	0.18
18-4-7-5	56	276.13	1 - 1.5 1.5 - 2		0.021	5.11	0.11
				·	0.021	5.11	0.11
18-4-7-5	56A	1.24	1 - 1.5	354	354	0.02	8.15
		ļ 	1.5 - 2 1 - 1.5	1,110	1,110	0.02 5.15	25.55 0.11
18-4-7-20	57	278.11	L		0.021	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	·		1.5 - 2		0.021	5.15	0.11
18-4-7-19	58	163.74	1 ~ 1.5	77 H 	0.021	3.03	0.06
		ļ	1.5 - 2 1 - 1.5		0.021	3.03 2.48	0.06
18-4-7-18	59	133.96	1.5 - 2	dr.b	0.021	2.48	0.05
	,		1 - 15	4:0	0.021	0.04	0.00
18-4-7-8	60	1.98	1.5 + 2	4-1	0.021	O. 04	0.00
			1.5 • 2	4-1b	0.021	3.11	0.07
17-21-8-3	61	168.01	1.5 - 2	#11b	0.021	3.11	0.07
				#1b		2.13	0.04
18-4-7-1	62	114.80	1 - 1.5 1.5 - 2	44	0.021	<u>4.13</u> 2.13	0.04
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1.5 - 2	#1t	0.021	0.95	0.02
18-4-7-17	63	51.15	1.5 - 2	Å 12	0.021	0.95	0.02
	^		1 - 1.5	30.8	30.8	0.29	8.95
18-4-7-17	63A	15.68	15-2	69	69	0.29	20.04
	·	 	1 - 1.5	109	109	0.18	19.70
18-4-7-6	64	9.76	1.5 - 2		126	0.18	22.77
	/		1 - 1.5	1/2/5	0.021	0.01	0.00
18-4-7-6	644	0.54	1.5 - 2		0.021	0.01	0.00
	·		1 - 1.5	18-81:	0.021	0.14	0.00
18-4-7-23	65	7.33	1.5 - 2	ıbdı	0.021	0.14	0.00
		- 40	1 - 1.5	204	204	0.05	9.76
18-4-7-23	65A	2.58	1.5 - 2	354	354	0.05	16.93
		45.00	1 - 1.5	17-01	6.021	0.76	0.02
17-21-8-9	66	40.88	1.5 - 2	144:	0.021	0.76	0.02
			1 - 1.5	11-10-	0.021	0.05	0.00
17-21-8-7	67	2.52	1.5 - 2	φ <b>.</b>	0.021	0.05	0.00

#### PARCEL 18-4-7 SPATIAL AVERAGE 1- TO 3-FOOT DEPTH INTERVAL

### PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 1- TO 2-FOOT DEPTH INCREMENT (contd)

Sample ID(s)	iFP codbyr ggdodri LICO	Polygon Area (aq. ft.)	Sample Depth Increment (ft.)	PCB Conc. (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (comulative) (cy)	Average PCB Conc. Times Total Volume
17-21-8-4	68	8.22	1 - 1.5	104:	0.021	0.15	0.00
		131	1.5 - 2	16ds	0.021	0.15	0.00
R54D100	69	189.97	1 - 1.5	1bd:	0.021	3.52	0.07
100100			1.5 - 2		0.021	352	0.07
R54C100	70	132.34	1 - 1.5	1t d:	0.021	2:45	0.05
110-10-10-0		, G.L., CF-7	1.5 - 2	##:	0.021	2.45	0.05
8-4-1-2	71	14.02	1 - 1.5	fr A	0.021	0.26	0.01
107-47-1-22		) = V . No. E.	1.5 - 2	11.6	0.021	0.26	0.01
R54B100	72	67.38	1 - 1.5	di A	0.021	1.25	0.03
110-100	1 E.	07.355	1.5 - 2	1r h	0.021	1.25	0.03
R54A100	73	286.83	1 - 1.5	1: à	0.021	5.34	0.11
P.3-17-100	; .)	2.00.00	1.5 - 2	1rk	0.021	5.31	0.11
18-4-1-7	7.4	95.57	1 - 1.5	91.3	91.3	1.77	161.59
(C)1-1	F 149	90.01	1.5 - 2	32.3	32.3	1.77	57.17
18-4-1-7	74A	52.85	1 - 1.5	<b>d</b> HB	0.021	0.98	0.02
(0-4-1-1	(46)	CPEC. (U.U)	1.5 - 2	dnb	0.021	0.98	0.02
18-4-2,3.4-10	75	34.06	1 - 1.5	<b>d</b> nt	0.021	0.63	0.01
10-49-42, 31,49-10	1.5	34.00	1.5 - 2	Ø 1b	0.021	0.63	0.01
18-4-2.3.4-10	75A	10.91	1 - 1.5	798	798	0.20	161.21
10-4-2,3.4-105	ram	(0.31	1.5 - 2	195	195	0.20	39.39
R93D125	76	148.49	1 - 1.5	Att	0.021	2.75	0.06
R93D120	76	140.418/	1.5 - 2	Ath	0.021	2.75	0.06
10 4 3 40	77	1.24.36	1 - 1.5	Art	0.021	2.30	0.05
18-4-7-12	"	1.24.30	1.5 - 2	1-1)	0.021	2.30	0.05
10 4 2 24			1 - 1.5	) A ()	0.021	1.08	0:02
18-4-7-21	78	58.38	1.5 - 2	·k 1/	0.021	1.08	0.02
10.4.0.0.4.3	2747	7.05	1 - 1.5	·k4;	0.021	0.14	0.00
18-4-2,3,4-1	79	7.35	1.5 - 2	(\$-4)	0.021	0.14	0.00
			1 - 1.5	shift	0.021	0 04	0.00
18-4-7-4	80	2.02	1.5 - 2	(bril)	0.021	0.04	0.00
Totals:		3329.69		/*************************************		123.32	553.70
		A	L	·		Volume Weighted Average:	4.49

#### PARCEL 18-4-7 SPATIAL AVERAGE 1- TO 3-FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 2- TO 3-FOOT DEPTH INCREMENT

Sampke ID(s)	Polygon 10	Polygon Area (sq. 1L)	Sample Depth Increment (ft.)	PC# Cone. (ppnt)	Total PCBs (ppm) for Spatial Avg	Volume (cwnuktive) (cy)	Average PCB Conc. Times Total Volume
II8-4-7-2	42	373.26	2 - 2.5	the dr	0.021	6.91	0.15
	×		2.5 - 3	(bd)	0:021	6.91	0.15
18-4-7-3	43	697.13	2 - 2.5	1646	0.021	12.91	0.27
			2.5 - 3	114	0.021	12.91	0.27
18-4-7-5	-41-4	384.01	2 - 2.5	11 d·	0.021	7.11	0.15
			2.5 - 3		0.021	7.11	0.15
18-4-7-5	44.4	1.24	2 - 2.5	704	704	0.02	16.21
		<b></b>	2.5 - 3	241	241	0.02	5.55
18-4-7-20	4.5	286.57	2 - 2.5	fr A	0.021	5.31	0.11
			2.5 - 3	1: h	0.021	5.31	0.11
18-4-7-19	46	256.55	2 - 2.5	deA	0.021	4.75	0.10
			2.5 - 3	1:A	0.021	4.75	0.10
18-4-7-18	4.7	171.45	2 - 2.5	1rh	0.021	3.17	0.07
	***************************************		2.5 - 3	4r4	0.021	3.17	0.07
17-21-8-3	48	175.28	2 - 2 5	4:4	0.021	3.25	0.07
			2.5 - 3	1:b	0.021	3.25	0.07
18-4-7-1	49	147.94	2 - 2.5	## 	0.021	2.74	0.06
			2.5 - 3	<b>1</b> ·1	0.021	2.74	0.06
18-4-7-17	50	53.36	2 - 2.5	#nb	0.021	0.99	0.02
	***************************************	ļ	2.5 - 3	#+ <b>+</b>	0.021	0.99	0.02
184-7-17	50A	15.68	2 - 2.5	29	2.9	0.29	8.42
			2.5 - 3	65.4	65.4	0.29	19.00
18-4-7-6	51. 51A	10.30	2 - 2.5	B1.2	81.2	0.19	15.49
			2.5 - 3	26.3	26.3	0.19	5.02
18-4-7-23	52.52A	9.92	2 - 2.5	263	263	0.18	48.29
10 * 1		4	2.5 - 3	280	280	0.18	51.41
17-21-8-7	53	2.52	2 - 2.5	#0	0.021	0.05	0.00
4 1 Tab. 1 TG 1 4			2.5 - 3	***	0.021	0.05	0.00
17-21-8-4	54	50.82	2 - 2.5	***	0.021	0.94	0.02
17 Tag. 1 T Q ****	J-1	G/G/, G45	2.5 - 3	40	0.021	0.94	0.02
18-4-1-2	55	162.15	2 - 2.5	44	0.021	3.00	0.06
10-4-1-2	ວບ	104.10	2.5 - 3	skrift	0.021	3.00	0.06

### PARCEL 18:4-7 SPATIAL AVERAGE 1- TO 3-FOOT DEPTH INTERVAL

### PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 4-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AMERAGE 2- TO 3-FOOT DEPTH INCREMENT (comt'd)

Sample ID(s)	Polygen ID	Polygon Anea (sq. ft.)	Sample Depth Increment (ft.)	PCB Conc. (ppn9)	Total PCBs (ppm) for Spatial Avg	Volume (cumulative) (cy)	Average PCB Conc. Times Total Volume
18-4-1-7	56	204.08	2 - 2.5 2.5 - 3	43.8	43.8	3.78	165.53
			(	29.4	29.4	3.78	111.11
18-4-1-7	56A	52.85	2 - 2.5	4nb	0.021	0.98	0.02
(1)		G2.00	2.5 - 3	#sh	0.021	0.98	0.02
18-4-2,3,4-10	57	34.06	2 - 2.5	Ant	0.021	0.63	0.01
10-4-2,3,4-10	U I	.041.UU	2.5 - 3	Ast	0.021	0.63	0.01
18-4-2,3,4-10	57A	10.91	2 - 2.5	24.8	24.8	0.20	5.01
10-4-2,3,4-10	2774	10.91	25-3	78.7	78.7	0.20	15.90
10 4 2 2 4 2	58	40.00	2 - 2.5	<b>\$</b> ()	0.021	0.25	0.01
18-4-2,3,4-2	96	13.65	2.5 - 3	10	0.021	0.25	0.01
10 4 7 40	J-45.	4.6.40	2 - 2.5	10	0.021	2.74	0.06
18-4-7-12	59	148.19	2.5 - 3	40	0.021	2.74	0.06
10 4 7 04	60	50.00	2 - 2.5	**	0.021	1.08	0.02
18-4-7-21	OU	58.38	2.5 - 3	10	0.021	1.08	0.02
10 4 0 0 4 4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	77.00	2 - 2.5	Þfr	0.021	0.14	0.00
18-4-2,3,4-1	61	7.35	2.5 - 3	·k 1)	0.021	0.14	0.00
145 4 - 79 4	00		2 - 2.5	· <b>\$</b> 4)	0.021	0.04	0.00
18-4-7-4	62	2.02	2.5 - 3	·h4)	0.021	0.04	0.00
Totals:		3329.69	•	**************************************		123.32	469.34
			/-		######################################	Violaime Weighbed Average:	3.81

#### OVERALL SUMMARY: 1- TO 3-FOOT DEPTH INTERVAL

		Polygon	Sample	1141		Volume	Average PCB
Sample	Polygon	A.rea	Depth Increment	PCB Conc.	Total PCBs	(cumulativa)	Conc. Times
ID(a)	10	(8q. ft.)	(ft.)	(falakte)	(ppm) for Spatial Avg	(C)(')	Total Volume
Totals:		3329.69				246.64	1023.04
						Volume Weighted Average:	4.15

#### Notes

- 1. ND(0.6) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations
- 2. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for clarity.
- 3. ** Indicates soil was removed at this clepth and clean backfill was placed at these locations. The backfill concentration corresponds to the average PCB concentration as presented in GE's Proposed CD Backfill Data Set (March 11, 2003)
- 4 Refer to Figure D-10 (1- to 2-foot depth increment) and Figure D-11 (2- to 3-foot depth increment) for the locations of the Polygon ID and corresponding Sample ID(s).

### PARCEL IB-4-7 SPATIAL AVERAGE 1- TO X- (1 TO 9) FOOT DEPTH INTERVAL

PRE-DESIGN INVESTIGATION REPORT/PCE SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 4-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### EXISTING CONDITIONS - 1- TO 3-FOOT DEPTH INTERVAL (TABLEC-6)

		Polygon	Sample	مال :		Volume	Average PCB
Sample	Polygon	Area	Depth Increment	PCB Conc.	Total PCBs	(cumulative)	Conc. Times
ID(s)	IID:	(8q. ft.)	(HL)	(ppan)	(ppm) for Spatial Avg	(cy)	Total Volume
Totals:		3329.69	***	***		246.64	1023.04
						Volume Weighted Average:	4.16

#### SPATIAL AVERAGE 3- TO 4-FOOT DEPTH INCREMENT

Sample	Polygon	Polygon Area	Sample Depth Increment	PCB Conc.	Totall PCBs	'Volume (cumulathyo)	Average PCB Conc. Thosa
ID(8)	10	(8g. fL)	(ft.)	(ppm)	(ppm) for Spatial Avg	(GY)	Total Volume
18-4-7-2	36	278.59	3 - 3.5	12.8	12.8	5.16	66.04
		22 11 101 1010	3.5 - 4	71.5	71.5	5.16	368.87
18-4-7-3	37	330.12	3 - 3.5	117	117	6.11	715.26
10 4 1 0		00.0% ( 2.	3.5 - 4	40.6	40.6	6.11	248.20
18-4-7-5	38.38A	219.87	3 - 3.5	4.5	4.5	4.07	18.32
104-1-3	30,000	2.10.01	3.5 - 4	42.5	42.5	4.07	173.04
2-SB-10	39	266.97	3 - 4	4.4	4.4	9.89	43.51
2-SB-9	40	328.40	3 - 4	0.074	0.074	12.16	0.90
2-SB-8	41,41A	564.28	3 - 4	0.063	0.063	20.90	1.32
2-SB-7	42	302.32	3 - 4	3.7	3.7	11.20	41.43
2-SB-11	43,43A,43B	99.15	3 - 4	0.078	0.078	3.67	0.29
18-4-7-19	44	111.23	3 - 3.5	13.2	13.2	2.06	27.19
10-4-1-19	""	111.23	3.5 - 4	1.32	1.32	2.06	2.72
18-4-7-18	45	79.64	3 - 3.5	38.9	38.9	1.47	57.37
10-46-7-10	45	7 81.1044	3.5 - 4	11.8	11.8	1.47	17.40
18-4-7-1	46	142.55	3 - 3.5	32.3	32.3	2.64	85.27
IO-49-7-1	40	#42.00	3.5 - 4	114	114	2.64	300.94
18-4-1-2	47	100 71	3 - 3.5	1.79	1.79	2.27	4.07
10-4-1-2	47	122.71	3.5 - 4	1,1	1.1	2.27	2.50

### PARCEL 18-4-7 SPATIAL AVERAGE 1- TO X- (1 TO 9) FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 3- TO 4-FOOT DEPTH INCREMENT (cont'd)

Sample ID(s)	Polygion ID	Polygion Amer (sig. fit.)	Sample Dopth Increment (ft.)	PCB Conc. (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (comulative) (cy)	Average PCB Comc. Times Total Volume
18-4-1-7	48.48A.48B	112.08	3 - 3.5	15.8	15.8	2:08	32.79
10-4-1-7	-107-707-7-1013	112.00	3.5 - 4	11.6	11.6	2:08	24.08
18-4-2,3,4-10	49,49A	44.97	3 - 3.5	14.605	14.605	0:83	12,16
10-44-20,-01,45-110	4:57,4:59,4	4949.53.7	3.5 - 4	28.5	28.5	0.83	23.73
18-4-7-21	50	125.39	3 - 3.5	1.99	1.99	2.32	4.62
10:-4-7-21	50	120.58	3.5 - 4	6.58	6.58	2.32	15.28
18-4-2,3,4-1	51	7.35	3 - 3.5	12.4	12.4	0.14	1.69
10-4-2,0,4-1	ij·I	7.30	3.5 - 4	1.84	1.84	0.14	0.25
18-4-7-4	52	2.02	3 - 3.5	16.5	16.5	0.04	0.62
10-4-7-4	5.2:	2.02	3.5 - 4	83.2	83.2	O.014	3.11
18-4-7-20	53	192.05	3 - 3.5	108	108	3.56	384.10
(0)-44-7-723	3.5	182.05	3.5 - 4	57.4	57.4	3.56	204.14
Totals:		3329.69		•	*-	123.32	2881.20
						Wolfman Welghted Average:	23.36

#### SPATTAL AVERAGE 4- TO 5-FOOT DEPTH INCREMENT

		Polygon	Sample			Volume	Average PCB
Sample	Polygon	V0/148/91	Depth Increment	PCB Cont.	Total PCBs	(cumulative)	Conc. Times
10(s)	10)	(sq. ft.)	(TL)	(ppm)	(ppm) for Spatial Avg	(cy)	Total Volume
8-4-7-2	36	278.59	4 - 4.5	12.2	12.2	5.16	62.94
10-4-7-2	30	£10.55	4.5 - 5	1.26	1.26	5.16	6.50
8-4-7-3	37	330.12	4 - 4.5	43.1	43.1	6.11	263.48
10-4-7-3	31	330.12	4.5 - 5	56.1	56.1	6.11	342.96
18-4-7-5	38.38A	219.87	4 - 4.5	19.2	19.2	4.07	78.17
10-4-7-0	30,308	2.10.07	4.5 - 5	25.8	25.8	4.07	105.05
2-SB-10	39	266.97	4 - 5	4.4	4.4	9.89	43.51

#### PARCEL IB-4-7 SPATIAL AVERAGE 1- TO X- (1 TO 9) FOOT DEPTH INTERVAL

## PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 4- TO 5-FOOT DEPTH INCREMENT (contd)

Sample IE(s)	Polygon ID	Polygon Arwa (sq. ft.)	Sample Depth Incomment (ft.)	PCB Conc. (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (cumulative) (cy)	Average PCB Conc. Times Total Volume
2-SB-9	40	328.40	4 - 5	0.074	0.074	12.16	0.90
2-SB-8	41,41A	564.28	4 - 5	0.063	0.063	20.90	1.32
2-SB-7	42	302.32	4 - 5	3.7	3.7	11.20	41.43
2-SB-11	43,43A,43B	99.15	4 - 5	0.078	0.078	3.67	0.29
18-4-7-19	44	111.23	4 - 4.5	19.8	19.8	2.06	40.79
10-4-7-13	-7-4	111.2.0	4.5 - 5	0.207	0.207	2.06	0.43
18-4-7-18	45	79.64	4 - 4.5	39.7	39.7	1.47	58.55
10-4-7-10		73.04	4.5 - 5	0.431	0.431	1.47	0.64
184-7-1	46	142.55	4 - 4.5	19.1	19.1	2.64	50.42
104-71	-,0	142.00	4.5 - 5	6,3	6.3	2.64	16.63
18-4-1-2	47	122.71	4 - 4.5	3,75	3.75	2.27	8.52
10		122.21	4.5 - 5	0.708	0.708	2.27	1.61
18-4-1-7	48.48A.48B	112.08	4 - 4.5	2.4	2.4	2.08	4.98
Manage Cont	170,46074,4600	112.00	4.5 - 5	7.75	7.75	2.08	16.09
18-4-2,3,4-10	49.49A	44.97	4 - 4.5	1.19	1.19	0.83	0.99
10-4-2,3,4-10	48,485	44.87	4.5 - 5	4.91	4.91	0.83	4.09
18-4-7-21	50	125.39	4 ~ 4.5	4,91 3,64	3.64	2.32	8.45
10	00	125.58	4.5 - 5	1.3	1.3	2.32	3.02
	51	7.35	4 - 4.5	1.3 3.12	3.12	0.14	0.42
10-4-2,5.4-1	31	r.30	4.5 - 5	0.829	0.829	0.14	0.11
18-4-7-4	52	2.00	4 - 4.5	11.5	11.5	0.04	0.43
1(3	94	2.02	4.5 - 5	2.47	2.47	0.04	0.09
18-4-7-20	53	192.05	4 - 4.5	1.81	1.81	3.56	6.44
10-4-7-20			4.5 - 5	0.392	0.392	3.56	1.39
Totals:		3329.69		-**		123.32	1170.63
		***************************************				Woluma Weighbed Average:	9.49

#### TABLE 0-7

### PARCEL IB-4-7 SPATIAL AVERAGE 1- TO X- (1 TO 9) FOOT DEPTH INTERVAL

PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 5- TO 6-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon 8D	Polygon Area (sq. ft.)	Sample Dopth Incoment (ft.)	PCB Conc. (ppm)	Fotal PCBs (ppno) for Spatial Avg	Yolume (cumulative) (cy)	Average PCB Conc. Times Total Volume
18-4-7-2	30	278.59	5 - 5.5	140[190]	165	5.16	851.23
10,	1	2.70.0.2	5.5 - 6	80.2	80.2	5.16	413.75
2-SB-10	31	266.97	5 - 6	4.4	4.4	9.89	43.51
2-SB-9	3.2	367.22	5 - 6	0.074	0.074	13.60	1.01
2-SB-11	33,33A,33E	99.15	5 - 6	0.078	0.078	3.057	0.29
18-4-7-3	34	408.79	5 - 5.5	6.79	6.79	7.57	51.40
10-4-1-2	34	4/00.78	5.5 - 6	60	60	7.57	454.21
18-4-7-5	35	211.73	5 - 5.5	60.8	60.8	3.92	238.39
10-4-7-D	35	211.73	5.5 - 6	11.9	11.9	3.92	46.66
2-SB-8	36.36A	593.46	5 - 6	9.063	0.063	21.98	1.38
2-SB-7	37	302.32	5 - 6	3.7	3.7	11.20	41.43
18-4-7-19	38	116.46	5 - 5.5	0.354	0.354	2.16	0.76
10-9-7-19	36	110.46	5.5 - 6	NID(0.1)	0.05	2.16	0.11
18-4-7-18	39	79.64	5 - 5.5	0.67	0.67	1.47	0.99
10:-9-7-10	1 28	79.04	5.5 - 6	0.466[0.753]	0.6095	1.47	0.90
18-4-7-1	40	142.55	5 - 5.5	23.7	23.7	2.64	62.56
10-9-7-1	40	F#4.55	5.5 - 6	9.3	9.3	2.64	24.55
2-SB-14	41,41A	135.96	5 - 6	0.027J	0.027	5.04	0.14
18-4-7-21	42	130.59	5 - 5.5	105	105	2.42	253.92
10:-9-7-21	4.4	130.58	5.5 - 6	2.5	25	2.42	60.46
18-4-7-4	43	4.17	5 - 5.5	13.5	13.5	0.08	1.04
(5-4-7-4	4.5	4.17	5.5 - 6	3.22	3.22	0.08	0.25
10 4 7 00	1 4	400.00	5 - 5.5	0.611	0.611	3.56	2.17
18-4-7-20	44	192.09	5.5 - 6	ND(0.1)	0.05	3.56	0.18
Totals:		3329.69	****	***		123.32	2551.28
						:eggsrev.A. betrigie'M' ermule'M	20.69

### PARCEL 18-4-7 SPATIAL AVERAGE 1- TO X- (1 TO 9) FOOT DEPTH INTERVAL

### PRE-DESIGN INVESTIGATION REPORT/PCB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### SPATIAL AVERAGE 6- TO 7-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Polygon Arba (sq. ft.)	Sample Depth Increment (ft.)	PCB Conc; (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (cumulative) (cy)	Average PCB Conc. Times Total Volume
2-SB-10	16	494.20	6 - 7	NID((0.039))	0.0195	18.30	0.36
2-SB-9	17	783.02	6 - 7	ND(0.04)[ND(0.039)]	0.01975	29.00	0.57
2-SB-8	18,18A	942.24	6 - 7	NID((0.04))	0.02	34.90	0.70
2-SB-7	19	610.22	6 - 7	NID((0. <b>039</b> ))	0.0195	22.60	0.44
2-SB-11	20.20A,20E	135.26	6 - 7	ND(0. <b>037</b> )	0.0185	5004	0.09
∥B-4-7-17 [#]	21	27.71	6 - 7	0.164	0.164	1.03	0.17
2-SB-14	22,22A	202.28	6 - 7	0.027J	0.027	7.49	0.20
18-4-7-21	23	134.75	6 - 6.5	61.1	61.1	2.50	152.47
100-4-7-21	2.3	11077. (10)	6.5 - 7	22.9	22.9	2.50	57.15
Totals:		3329.69	***			123.32	212.15
						seganevA. beträgleWV armilleW	1.72

#### SPATIAL AVERAGE 7- TO \$-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Polygon Area (sq. it.)	Sample Depth Increment (ft.)	PCB Cone. (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (cumulative) (cy)	Average PCB Conc. Times Total Volume
2~SB-10	14	497.87	7 - 9	ND(0.039)	0.0195	3688	0.72
2-SB-9	1.5	783.02	7 - 9	ND(0.04)[ND(0.039)]	0.01975	58.00	1.15
2-SB-8	16,16A	942.24	7 - 9	NID(0.04)	0.02	69080	1.40
2-56-7	17	610.22	7 - 9	ND(0.039)	0.0195	4520	0.88
2-SB-11	18.18A,18E	159.30	7 - 9	ND(0.037)	0.0185	11.80	0.22
2-SB-14	19,19A	202.28	7 - 9	0.039	0.039	14.98	0.58
			7 - 7.5	7.64	7.64	2.50	19.07
18-4-7-21	20	134.75	7.5 - 8	0.16	0.16	2,50	0.40
10-4-7-21	1 20	1 (2049), (13)	8 - 8.5	0.349	0.349	2.50	0.87
		l	8.5 - 9	0.263	0.263	2.50	0.66
Totals:		3329.69	***************************************	4-49	···	246.64	25.94
***************************************	·*	<b>-</b>			***************************************	Votume Weighted Average:	0.11

### PARCEL IS-4-7 SPATIAL AVERAGE 1- TO X- (1 TO 9) FOOT DEPTH INTERVAL

### PRE-DESIGN INVESTIGATION REPORT/PIGB SOIL EVALUATION REPORT AND CONCEPTUAL REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH

#### GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

OVERALL SUMMARY: 1- TO X- (1 TO 9) FOOT DEPTH INTERVAL

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Polygon	Sample			V/c)-liui erreb	Average PCB
Sample	Polygon	Area	Depth Increment	PCB Conc.	Total PCBs	(country collected was)	Conc. Times
ID(a)	(D)	(9¢j. ft.)	(ft.)	(ppan)	(ppm) for Spatial Avg	(cy)	Total Volume
Totals:	***	3329.69	·-			986.57	7864.24
						Volume Welghbert Average:	7.97

#### Notes

- 1. NID(0.6) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations.
- 2. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for clarify.
- 3. *** Indicates soil was removed at this depth and clean backfill was placed at these locations. The backfill concentration corresponds to the average PCB concentration as presented in GE's Proposed CD Backfill Data Set (March 11, 2003)
- 4. # Indicates that the existing sample increment was extended to coincide with the depth interval being evaluated. For example, existing data from the 6 8 5 foot depth increment was evaluated as a 5 7 foot depth increment for purposes of this spatial average evaluation.
- 5. Refer to Figures D-12 (3- to 4-foot depth increment), D-13 (4- to 5-foot depth increment), D-14 (5- to 6-foot depth increment), D-15 (6- to 7-foot depth increment), and D-16 (7- to 9-foot depth increment), for the locations of the Polygon ID and corresponding Sample ID(s)

#### <u>PARCEL 18-4-7</u> SPATIAL AVERAGE 0- TO 15-FOOT DEPTH INTERVAL

# PRE-DESIGN INVESTIGATION AND PCB SOIL EVALUATION REPORT FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-1/2 MILE REACH OF HOUSATONIC RIVER GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### EXISTING CONDITIONS - 0- TO 1-FOOT DEPTH INTERVAL (TABLE C-5)

		Polygon	Sample			Volume	Average PCB
Sample	Polygon	Area	Depth Increment	PCB Gonc.	Total PCBs	(cumulative)	Conc. Times
ID(s)	ID:	(8¢ . ft.)	(ft.)	(ppm)	(p.pm) for Spatial Avg	(GY)	Total Volume
Totals:		3329.69		A-1		123.32	767.36
						"V" celluarana "V"V'ailigaladead" "Assvaerraigae:	6.22

#### EXISTING CONDITIONS - 1 TO 9 FOOT DEPTH INTERVAL (TABLE C-7)

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Polygon	Sample		,	Worll Littage	Average PCB
Sample	Polygon	.A.rea	Depth Increment	PCB Conc.	Total PCBs	(cocorradu laddiwae)	Conc. Times
(ID(B)	ID	(8g. ft.)	(ft.)	((ph(phris))	(ppm) for Spatial Avg	(c:y)	Total Volume
Totals:		3329.69			•••	986.57	7864.24
						Volume Weighted Average:	7.97

#### EXISTING CONDITIONS - \$- TO 10- FOOT DEPTH INTERVAL

		Polygon	Sample			Volume	Average PCB
Sample	Polygon	Airea	Depth Increment	PCB Coms.	Total PCBs	(communitative)	Conc. Times
(ID(B)	110	(#)q. fft.)	(ft.)	((p) (anno)	(ppm) for Spatial Avg	(cy/)	Total Volume
2-SB-10	14	498.35	9 ~ 10	ND(0.039)	0.0195	18.46	0.36
2-SB-9	15	783.59	9 - 10	ND(0.04)[ND(0.039)]	0.01975	29.02	0.57
2-SB-8	16,164	1005.32	9 - 10	ND(0.04)	0.02	37.23	0.74
2-SB-7	17,17A	884.77	9 - 10	ND(0.039)	00195	32.77	0.64
2-SB-11	18,18A,18B	159.30	9 - 10	ND(0.037)	0.0185	5.90	0.11
Totals:		3329.69		(P.B.		123.38	2.43
						Volume Weighted Average:	0.02

#### EXISTING CONDITIONS - 10- TO 15- FOOT DEPTH INTERVAL

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth Increment (ft.)	PCB Conc. (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (cumulative) (cy)	Average PCB Conc. Times Total Volume
2-SB-9	(Ei	1069.57	10 - 15	ND(0.038)	0.019	198-07	3.76
2-SB-8	7,7A	1889.50	10 - 15	ND(0.037)	0.0185	349:91	6.47
2-SB-11	8,84,88	370.62	10 - 15	ND(0:037)	0.0185	68.63	1.27
Totals:		3329.69	p.o			616.61	11.51
***************************************						Volume Weighted Average:	0.02

#### PARCEL 18-4-7 SPATIAL AVERAGE 0- TO 15-FOOT DEPTH INTERVAL

#### PRE-DESIGN INVESTIGATION AND PCB SOIL EVALUATION REPORT FOR PHASE 2 FLOODPLAIN PROPERTIES ADJACENT TO THE 1-4/2 MILE REACH OF HOUSATONIC RIVER GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

#### OVERALL SUMMARY: 0- TO 15-FOOT DEPTH INTERNAL

Sample ID(s)	Polygon (D	Polygon Area (sc. ft.)	Sample Depth Increment (R.)	PCB Coite. (ppm)	Total PCBs (ppm) for Spatial Avg	Volume (cumulative) (cy)	Average PCB Conc. Times Total Volumb
Totals:	***	3329.69	···-	***		1849.89	8645.53
***************************************						Volume Weighted Arrenge:	4.67

#### Notes

- 1. ND(0.6) Analyte was not detected. Detection limit shown in parenthesis. Half the detection limit was used in calculations.
- 2. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for clarity.
- 3. Refer to Figures D-17 and D-18 for the locations of the Polygon ID and corresponding Sample ID(s).

